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660

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<210> 5710

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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			20					25				30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35					40				45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

50	55	60
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65	70	75
Val Glu Leu His Leu His His Asn Pro Trp Asn Cys Asp Cys Asp Ile		80
	85	90
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr		95
	100	105
Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu		110
	115	120
Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met		125
	130	135
Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu		140
145	150	155
Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn		160
	165	170
Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu		175
	180	185
Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly		190
	195	200
Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser		205
	210	215
Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser		220
225	230	235
Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp		240
	245	250
Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln		255
	260	265
Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val		270
	275	280
Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln		285
	290	295
Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Ile Gly Cys		300
305	310	315
Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr		320
	325	330
Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg		335
	340	345
Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser		350
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Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val		365
	370	375
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro		380
385	390	395
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His		400
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Pro Thr Val Thr Thr Ile Ser Glu Pro Tyr Ile Ile Gln Thr His Thr		415
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Lys Asp Lys Val Gln Glu Thr Gln Ile		430
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

<400> 5711

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 180
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<210> 5712

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5712

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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
		20					25				30				
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35				40					45				

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
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 130 135 140
 Glu
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

<400> 5713

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 240
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 1860
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 1996

<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
			35				40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
	50					55					60				
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
65					70					75				80	
Asp	Arg	His	Leu	Arg	Lys	Leu	Asp	Gln	Glu	Leu	Ala	Lys	Phe	Lys	Met

				85					90					95			
Glu	Leu	Glu	Ala	Asp	Asn	Ala	Gly	Ile	Thr	Glu	Ile	Leu	Glu	Arg	Arg		
			100					105					110				
Ser	Leu	Glu	Leu	Asp	Thr	Pro	Ser	Gln	Pro	Val	Asn	Asn	His	His	Ala		
			115					120				125					
His	Ser	His	Thr	Pro	Val	Glu	Lys	Arg	Lys	Tyr	Asn	Pro	Thr	Ser	His		
			130				135				140						
His	Thr	Thr	Thr	Asp	His	Ile	Pro	Glu	Lys	Lys	Phe	Lys	Ser	Glu	Ala		
145					150					155					160		
Leu	Leu	Ser	Thr	Leu	Thr	Ser	Asp	Ala	Ser	Lys	Glu	Asn	Thr	Leu	Gly		
				165					170					175			
Cys	Arg	Asn	Asn	Asn	Ser	Thr	Ala	Ser	Ser	Asn	Asn	Ala	Tyr	Asn	Val		
			180					185					190				
Asn	Ser	Ser	Gln	Pro	Leu	Gly	Ser	Tyr	Asn	Ile	Gly	Ser	Leu	Ser	Ser		
			195				200					205					
Gly	Thr	Gly	Ala	Gly	Ala	Ile	Thr	Met	Ala	Ala	Ala	Gln	Ala	Val	Gln		
			210			215					220						
Ala	Thr	Ala	Gln	Met	Lys	Glu	Gly	Arg	Arg	Thr	Ser	Ser	Leu	Lys	Ala		
225					230					235					240		
Ser	Tyr	Glu	Ala	Phe	Lys	Asn	Asn	Asp	Phe	Gln	Leu	Gly	Lys	Glu	Phe		
				245					250					255			
Ser	Met	Ala	Arg	Glu	Thr	Val	Gly	Tyr	Ser	Ser	Ser	Ser	Ala	Leu	Met		
			260					265					270				
Thr	Thr	Leu	Thr	Gln	Asn	Ala	Ser	Ser	Ser	Ala	Ala	Asp	Ser	Arg	Ser		
			275				280					285					
Gly	Arg	Lys	Ser	Lys	Asn	Asn	Asn	Lys	Ser	Ser	Ser	Gln	Gln	Ser	Ser		
			290			295					300						
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Leu	Ser	Ser	Cys	Ser	Ser	Ser	Ser	Thr		
305					310					315					320		
Val	Val	Gln	Glu	Ile	Ser	Gln	Gln	Thr	Thr	Val	Val	Pro	Glu	Ser	Asp		
				325					330					335			
Ser	Asn	Ser	Gln	Val	Asp	Trp	Thr	Tyr	Asp	Pro	Asn	Glu	Pro	Arg	Tyr		
			340					345					350				
Cys	Ile	Cys	Asn	Gln	Val	Ser	Tyr	Gly	Glu	Met	Val	Gly	Cys	Asp	Asn		
			355				360					365					
Gln	Asp	Cys	Pro	Ile	Glu	Trp	Phe	His	Tyr	Gly	Cys	Val	Gly	Leu	Thr		
			370			375					380						
Glu	Ala	Pro	Lys	Gly	Lys	Trp	Tyr	Cys	Pro	Gln	Cys	Thr	Ala	Ala	Met		
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<210> 5715
<211> 1458
<212> DNA
<213> Homo sapiens
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180
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 480
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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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Glu Cys Leu His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln																		
	35							40			45							
Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln																		
	50			55					60									
Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr																		
65	70						75							80				
Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu																		
	85					90									95			
Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu																		
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Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His																		
	115			120					125									
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<211> 1419
<212> DNA
<213> Homo sapiens
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720
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780
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900

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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

Met	Ser	Met	Ala	Val	Glu	Thr	Phe	Gly	Phe	Phe	Met	Ala	Thr	Val	Gly
1				5				10						15	
Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
			35				40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
			50			55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70						75				80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85				90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
			115				120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
			130				135				140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150						155				160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
				165				170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185					190		
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
			195				200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
			210			215					220				
Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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120
ctccgtgccca tgcagtcggg aaagggaaac aggcactaat caaaggcaac tgetcactcg
180
tacctctttc ttctgaagca catgatgaag tctattctca gcagcgattt tctttacaaa
240
ctctttcggt aatcccccca gagggagat ggttctctc agggcatcct gggaaacctg
300
gcatttctaa cttcaaaccg atttctgaaa agcccttcgg gcttcttaac gtgcttctgc
360
tcaaagactt cttcatcttc cagggaggtt cttgcatagt gacctgtggc aatggcatct
420
gccctgaac acatcattcc aatactcctt tacgtaggac acttgatgga aagggatgtc
480
taagatctgg caaactctgt aagcatcttc acagtctttg tcggcagtac agaccccatg
540
ttcatccagt gagtcccagt tcttcataaa caccctgtc acctggtaac ctctccgcct
600
cagcagcagc ggggccacgg cgctgtccac gccgccggac agggcgcaaca cgacgtgccg
660
caaggcctgc atccgccagt cggcccgctc ggcggcggtg acagcgccgt ggccgcgctg
720
ctgctgaggg ggagagggtta ccagggtgaca ggggtgttta tgaagaactg ggactcactg
780
gatgaacatg ggggtctgtac tgccgacaaa gactgtgaag atgcttacag agtttgccag
840
atcttagaca tccctttcca tcaagtgtcc tacgtaaagg agtattggaa tgatgtgttc
900
agtgaacttt tgaatgagta tgaaaaagga aggactccca atcctgacat agtttgcaac
960
aagcacatca aatttagttg cttttttcat tatgctgtgg ataactcttg ggcagatgcc
1020
attgccacag gtcactatgc aagaacttcc ctggaagatg aagaagtctt tgagcagaag
1080
cacgttaaga agcccgaagg gcttttcaga aatcggtttg aagttagaaa tgcggtaaaa
1140
ctcctccagg cagctgacag ctttaaagac cagaccttct ttctcagcca ggtttcccag
1200
gatgccctga ggagaacct cttccctctg gggggattaa cgaaagagtt tgtaaagaaa
1260
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1320
ttcatcgga agaggaattt tgaacatttc cttcttcagt atctgcagcc tcgacctggg
1380

cactttatatt ccatagaaga caataagggtt ctgggaacac ataaagggtt gttcctgtat
 1440
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 1500
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 1560
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 1620
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 1680
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 1740
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 1860
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 1920
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 1980
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 2040
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 2100
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 2160
 gccccaggg agggtttccc acctcagagt acaccgaggg gacctgcaga gggggctgtc
 2220
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40					45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
		50				55					60				
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70					75				80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100						105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130	135	140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly		
145	150	155
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys		160
	165	170
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg		175
	180	185
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr		190
	195	200
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe		205
	210	215
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu		220
225	230	235
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys		240
	245	250
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln		255
	260	265
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly		270
	275	280
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile		285
	290	295
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys		300
305	310	315
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg		320
	325	330
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro		335
	340	345
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg		350
	355	360
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly		365
	370	375
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly		380
385	390	395
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys		400
	405	410
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg		415
	420	425
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly		430
	435	440
Pro Gly Leu Ser Pro Leu Leu		445
450	455	

<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

ttagacatag ctaaccagac aggcagatca atcagaattc ccccatcaga aagaaaagcc

60

cttatgttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat

120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac

180

ttggtgaaca ccagcttttaa ggaagatggc ccagactata cagaacacct gccatgccct
 240
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atggtgtaaa
 300
 ctggtgaatt tcttcttccc tttgtatttc taattgacct ttcctccctg taaagaaaag
 360
 aattttcaag caggtaggat atgctctctt tttctgtaca
 400

<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

Leu	Asp	Ile	Ala	Asn	Gln	Thr	Gly	Arg	Ser	Ile	Arg	Ile	Pro	Pro	Ser
1				5				10					15		
Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His	Glu	Lys	Gly	Arg
			20				25					30			
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
			35			40					45				
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50				55					60					
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
65				70				75				80			

<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

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 60
 aagaatgtgg agagttttct agaagcctgt cgaaaaatgg ggggtgcctga ggtatggggg
 120
 ctgctttcta aagagtgggtg gcatgccgga ctcagcggag ccatgtggca tggatgggtg
 180
 gcttccattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgcctgccc
 240
 cagcatgccc cctgccctgc atgccccctg ccctgcatgt cacctgtcct acacatcccc
 300
 tgccctgcag gcccattctt gtccctgcatg tcacctgtcc tgcacatgcc ctgcctgca
 360
 ctctcctcgc acgcgt
 376

<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
	20	25	30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
	35	40	45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
	50	55	60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
	85	90	95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
	100	105	110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
	115	120	125

<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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gcttttttttc cttttctccc tccgcgtctc ctttttgact cccctcccct ttatgctcgc
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120
accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgctcc cgggggcccc
180
ttcccggggg tctccaccga tgacagcgcc gtgccgccgc cgggaggggc gccccatttc
240
gggcactacc ggacggggcg cggggccatg gggctgcgca ggcacatcggc cagctcggtg
300
gcaggcatgg gcatggaccc cagcacggcc ggggggggtgc ctttggcct ctacaccccc
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540
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660
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720
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780
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840
gactcctctc aaagggacag agcggccctg ctccaggag gaggtcacc ggaccctggg
900
gcagagctga gcttgggaca ccagcgggaa cagggcaccc cttctgcact gacttcaga
960

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tcattggttct ccttctctcc ctgaggacac caaattggat gagagcaagt ttgagagaag
 1020
 aatgaatcaa ctgctatcct tcccctcacc cctcagccca ggaggggaaag ggcattttct
 1080
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 1140
 aaaaaaagtc tagtgctgac
 1160

<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro	Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro	1	5	10	15
Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly	20	25	30	
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly	35	40	45	
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val	50	55	60	
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe	65	70	75	80
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser	85	90	95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly	100	105	110	
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser	115	120	125	
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala	130	135	140	
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly	145	150	155	160
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu	165	170	175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro	180	185	190	
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile	195	200	205	
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr	210	215	220	
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly	225	230	235	240
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys	245	250	255	
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala	260	265	270	

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag
180
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300
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360
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420
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480
tacacactga tgagtaacaa gcaatactat gatgccctct gcagtggaga aatctgcaac
540
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600
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720
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840
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900
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960
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1020
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1080
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc tttaaccaact agcgtgagg
1140
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1200
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa
1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln

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Trp	Glu	Gly	Val	Gly	Ala	Thr	Met	Ser	Ser	Tyr	Gln	Lys	Glu	Leu	Glu
	20	25	30												
Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu	Ser	Pro
	35	40	45												
Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp	Pro	Glu
	50	55	60												
Asn	Met	Leu	Leu	Pro	Ala	Gly	Leu	Arg	Gln	Arg	Asp	Gln	Thr	Lys	Lys
65				70					75						80
Ser	Pro	Thr	Gly	Pro	Leu	Asp	Arg	Glu	Ala	Leu	Leu	Gln	Tyr	Leu	Glu
			85					90						95	
Gln	Gln	Ala	Leu	Glu	Val	Lys	Glu	Arg	Asp	Asp	Leu	Val	Pro	Phe	Thr
	100						105					110			
Gly	Glu	Lys	Lys	Gly	Lys	Pro	Tyr	Ile	Gln	Pro	Lys	Arg	Glu	Ile	Pro
	115						120					125			
Ala	Glu	Glu	Gln	Ile	Thr	Leu	Glu	Pro	Glu	Leu	Glu	Glu	Ala	Leu	Ala
	130					135					140				
His	Ala	Thr	Asp	Ala	Glu	Met	Cys	Asp	Ile	Ala	Ala	Ile	Leu	Asp	Met
145				150					155						160
Tyr	Thr	Leu	Met	Ser	Asn	Lys	Gln	Tyr	Tyr	Asp	Ala	Leu	Cys	Ser	Gly
			165					170						175	
Glu	Ile	Cys	Asn	Thr	Glu	Gly	Ile	Ser	Ser	Val	Val	Gln	Pro	Asp	Lys
	180							185				190			
Tyr	Lys	Pro	Val	Pro	Asp	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Ile	Glu	Glu
	195					200						205			
Ile	Leu	Lys	Arg	Val	Arg	Ser	Asn	Asp	Lys	Glu	Leu	Glu	Glu	Val	Asn
	210					215				220					
Leu	Asn	Asn	Ile	Gln	Asp	Ile	Pro	Ile	Pro	Met	Leu	Ser	Glu	Leu	Cys
225				230						235					240
Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu	Val	Ala
			245						250					255	
Thr	Arg	Ser	Gly	Asp	Pro	Ile	Ala	Asn	Ala	Val	Ala	Asp	Met	Leu	Arg
	260						265					270			
Glu	Asn	Arg	Ser	Leu	Gln	Ser	Leu	Asn	Ile	Glu	Ser	Asn	Phe	Ile	Ser
	275					280						285			
Ser	Thr	Gly	Leu	Met	Ala	Val	Leu	Lys	Ala	Val	Arg	Glu	Asn	Ala	Thr
	290					295					300				
Leu	Thr	Glu	Leu	Arg	Val	Asp	Asn	Gln	Arg	Gln	Trp	Pro	Gly	Asp	Ala
305				310					315						320
Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser	Ile	Val
			325						330					335	
Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg	Ala	Ala
	340						345					350			
Gln	Ala	Met	Thr	Arg	Asn	Asn	Glu	Leu	Arg	Arg	Gln	Gln	Lys	Lys	Arg
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<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 240
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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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			20					25				30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 720
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 780
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 891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
			20					25					30		
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35					40					45			
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50					55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
				85				90					95		
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105					110		
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135						140			
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165					170						175	
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 120

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<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25					30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
		50				55				60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
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Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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180
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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
			35				40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
		50				55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90					95	
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

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Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe					
130		135		140	
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala					
145		150		155	160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln					
	165		170		175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro					
	180		185		190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser					
	195		200		205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala					
	210		215		220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu					
225		230		235	240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu					
	245		250		255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu					
	260		265		270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp					
	275		280		285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu					
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Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln					
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<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5738

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          20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
          35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
          50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
          85           90           95
Gly Gly Xaa

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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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120
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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
          35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
          50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
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Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
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Phe Leu Gly Arg Ala Gln Pro Gln
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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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<210> 5742

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5742

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Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
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Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
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Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
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Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
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Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
           115          120          125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
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Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
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Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
           165          170          175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
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Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
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Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
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Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
           225          230          235          240
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Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
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Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
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Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
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Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
           355          360          365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
           370          375          380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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385		390		395		400									
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 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 5743
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 <212> PRT
 <213> Homo sapiens

<400> 5744															
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Pro	Cys	Glu	Gly	Glu	Arg	Pro	Pro	Tyr	Leu	Gly	Arg	Pro	Ala	Met	Cys
			20					25				30			
Cys	Lys	Gly	Ala	Arg	Arg	Pro	Gly	Cys	Pro	Thr	Pro	Glu	Thr	Gly	Gln
		35				40					45				
Gly	Gly	Arg	Pro	Pro	Lys	Gly	Pro	Arg	Thr	Gly	Arg	Pro	Ala	Pro	Ser
	50				55				60						
Pro	Gly	Ser	Pro	Pro	Arg	Glu	Ser	Arg	Cys	Leu	Ala	Pro	Xaa	Asp	Pro
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Leu	Gly	Trp	Thr	Pro	Gly	Pro	Pro	Ala	Ala	Pro	Gly	Ala	Leu		
			85					90					95		

<210> 5745
 <211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

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240
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300
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gcccttcccg tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga
420
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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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          20           25           30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
          35           40           45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
          50           55           60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65           70           75           80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
          85           90           95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

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	100		105		110
Leu	Cys	Ile	Leu	Leu	Trp
			Pro	Ala	Val
			Ser	Ala	Gly
			Gly	Gly	Ser
			Gln	Arg	
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<210> 5747

<211> 1999

<212> DNA

<213> Homo sapiens

<400> 5747

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1260

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<210> 5748

<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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			20					25					30		
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
		35					40					45			
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
		50				55					60				
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
65					70				75					80	
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
			85						90					95	
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
			100					105					110		
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
		115					120				125				
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
		130				135					140				
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
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<210> 5749
<211> 2849
<212> DNA
<213> Homo sapiens
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4907

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<211> 522

<212> PRT

<213> Homo sapiens

<400> 5750

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			20					25					30		
Val	Gly	Pro	Gly	Ala	Ser	Gly	Val	Cys	Pro	Thr	Ala	Cys	Ile	Cys	Ala
			35				40					45			
Thr	Asp	Ile	Val	Ser	Cys	Thr	Asn	Lys	Asn	Leu	Ser	Lys	Val	Pro	Gly
	50				55					60					
Asn	Leu	Phe	Arg	Leu	Ile	Lys	Arg	Leu	Asp	Leu	Ser	Tyr	Asn	Arg	Ile
65				70					75				80		
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4910

515

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<210> 5751

<211> 926

<212> DNA

<213> Homo sapiens

<400> 5751

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<210> 5752

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5752

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Leu Glu Ile Arg Ser Val His Val Gly Val Val Val Ile Lys Ala Val
35          40          45
Ser Ser Gly Phe Tyr Val Ala Met Asn Arg Arg Gly Arg Leu Tyr Gly

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Ser Arg Leu Tyr Thr Val Asp Cys Arg Phe Arg Glu Arg Ile Glu Glu		
65	70	75
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	85	90
Pro Met Phe Leu Ala Leu Asp Arg Arg Gly Gly Pro Arg Pro Gly Gly		95
	100	105
Arg Thr Arg Arg Tyr His Leu Ser Ala His Phe Leu Pro Val Leu Val		110
	115	120
		125
Ser		

<210> 5753

<211> 5668

<212> DNA

<213> Homo sapiens

<400> 5753

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<213> Homo sapiens

<400> 5754

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5756

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<213> Homo sapiens

<400> 5758

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<212> DNA
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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 5766
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<400> 5766
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 Leu Ser Ala Asp Ala Asp Gly Gln Ile Lys Cys Trp Ser Met Ala Asp
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 His Leu Ala Asn Ser Trp Glu Ser Ser Val Gly Ser Leu Val Glu Gly
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 Asp Pro Ile Val Ala Leu Ser Trp Leu His Asn Gly Val Lys Leu Ala
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 Leu His Val Glu Lys Ser Gly Ala Ser Ser Phe Gly Glu Lys Phe Ser
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 Arg Val Lys Phe Ser Pro Ser Leu Thr Leu Phe Gly Gly Lys Pro Met
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 Glu Gly Trp Ile Ala Val Thr Val Ser Gly Leu Val Thr Val Ser Leu
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 Leu Arg Gly Arg Val Ala Leu Ala Asp Ile Ala Phe Thr Gly Gly Gly
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 Thr Glu Ile Leu Pro Ser Leu Phe Met Arg Cys Thr Thr Asp Leu Asn
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Leu His Leu Gly Ala Cys	Pro Thr Glu Glu Cys Lys	Ala Cys Thr Arg		
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Cys Gly Cys Val Thr Met	Leu Lys Ser Pro Asn Arg	Thr Thr Ala Val		
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Lys Gln Trp Glu Gln Arg	Trp Ile Lys Asn Cys Leu	Cys Gly Gly Leu		
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<210> 5767

<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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			20					25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
			35				40					45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
			50			55				60					
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65					70				75					80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
			85					90					95		
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
			100				105					110			
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
			115				120					125			
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145		150		155	160
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu					
	165		170		175
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn					
	180		185		190
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln					
	195		200		205
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn					
	210		215		220
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu					
225		230		235	240
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp					
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	260		265		270
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser					
	275		280		285
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	290		295		300
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His					
305		310		315	320
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu					
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<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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gtaaaggaga gcaaataggag ttcttcaatg aatagcatca agatcttctg gggcccagag
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300

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427

<210> 5770

<211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5770
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 35 40 45
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
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<210> 5771
 <211> 2539
 <212> DNA
 <213> Homo sapiens

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<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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		20						25					30		
Val	Arg	Cys	Ala	Thr	Pro	Pro	Gln	Leu	Ala	Asn	Gly	Val	Thr	Glu	Gly
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Leu	Asp	Tyr	Gly	Phe	Met	Lys	Glu	Val	Thr	Phe	His	Cys	His	Gly	Leu
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Asp	Ala	Glu	Ile	Pro	Leu	Cys	Lys	Pro	Val	Asn	Cys	Gly	Pro	Pro	Glu
				85					90					95	
Asp	Leu	Ala	His	Gly	Phe	Pro	Asn	Gly	Phe	Ser	Phe	Ile	His	Gly	Gly
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His	Ile	Gln	Tyr	Gln	Cys	Phe	Pro	Gly	Tyr	Lys	Leu	His	Gly	Asn	Ser
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Ser	Arg	Arg	Cys	Leu	Ser	Asn	Gly	Ser	Trp	Ser	Gly	Ser	Ser	Pro	Ser
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Cys	Leu	Pro	Cys	Arg	Cys	Ser	Thr	Pro	Val	Ile	Glu	Tyr	Gly	Thr	Val
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Asn	Gly	Thr	Asp	Phe	Asp	Cys	Gly	Lys	Ala	Ala	Arg	Ile	Gln	Cys	Phe
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Lys	Gly	Phe	Lys	Leu	Leu	Gly	Leu	Ser	Glu	Ile	Thr	Cys	Glu	Ala	Asp
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Tyr	Pro	Val	Cys	Glu	Pro	Leu	Ser	Cys	Gly	Ser	Pro	Pro	Ser	Val	Ala
		260						265						270	
Asn	Ala	Val	Ala	Thr	Gly	Glu	Ala	His	Thr	Tyr	Glu	Ser	Glu	Val	Lys
		275					280					285			
Leu	Arg	Cys	Leu	Glu	Gly	Tyr	Thr	Met	Asp	Thr	Asp	Thr	Asp	Thr	Ile
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Thr	Cys	Gln	Lys	Asp	Gly	Arg	Trp	Phe	Pro	Glu	Arg	Ile	Ser	Cys	Ser
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Pro	Lys	Lys	Cys	Pro	Leu	Pro	Glu	Asn	Ile	Thr	His	Ile	Leu	Val	His
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Gly	Asp	Asp	Phe	Ser	Val	Asn	Arg	Gln	Val	Ser	Val	Ser	Cys	Ala	Glu
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<210> 5773
<211> 579
<212> DNA
<213> Homo sapiens
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4939

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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55				60					
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
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Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
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<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 480

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<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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			20					25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
			35					40					45		
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
			50					55					60		
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Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
						85				90				95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

Pro	Glu	Gly	Ala	Pro	Glu	Arg	Ala	Ala	Glu	Leu	Gly	Val	Asn	Phe	Gly
			100					105					110		
Arg	Ser	Arg	Gln	Gly	Ser	Ala	Arg	Gly	Thr	Lys	Pro	His	Arg	Cys	Glu
			115					120					125		
Ala	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Leu	Leu	Leu	Lys	His	Gln
			130					135					140		
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	His	Glu	Cys	Gly	Lys
				165						170				175	
Cys	Phe	Ala	Ala	Ala	Ser	Arg	Phe	Ile	Gln	His	Gln	Arg	Ile	His	Ser
			180					185					190		
Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Pro	Glu	Cys	Ser	Lys	Thr	Phe	Thr	Arg
			195					200					205		
Ser	Ser	Asn	Leu	Ile	Lys	His	Gln	Val	Ile	His	Ser	Gly	Glu	Arg	Pro
			210					215					220		
Phe	Ala	Cys	Gly	Asp	Cys	Gly	Lys	Leu	Phe	Arg	Arg	Ser	Phe	Ala	Leu
				230						235					240
Leu	Glu	His	Ala	Arg	Val	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser
				245						250				255	
Asp	Cys	Gly	Lys	Cys	Phe	Arg	Gly	Arg	Ser	His	Phe	Phe	Arg	His	Asn
			260					265					270		
Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Leu	Asp	Cys	Gly	Lys
			275					280					285		
Ser	Phe	Ser	His	Ser	Ser	His	Leu	Ile	Lys	His	Gln	Arg	Thr	His	Arg
			290				295					300			
Gly	Val	Arg	Pro	Tyr	Ala	Cys	Pro	Leu	Cys	Gly	Lys	Ser	Phe	Ser	Arg
			305			310				315					320
Arg	Ser	Asn	Leu	His	Arg	His	Glu	Lys	Ile	His	Thr	Thr	Gly	Pro	Lys
				325						330				335	
Ala	Leu	Ala	Met	Leu	Met	Leu	Gly	Ala	Ala	Ala	Ala	Gly	Ala	Leu	Ala
			340					345					350		
Thr	Pro	Pro	Pro	Ala	Pro	Thr									
			355												

<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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120

tgctgctggc ctgcctcaag caaccaggta cgtaggctcg cgcccagct cggcgctgct
180

gtgggagccg gagggcgaca gtcagagccg ggggtgccagc gggacgcgac cgccagatcc
240

acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tcccggggcc tcctcgtgct
300

gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccg
360

gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgcc
420

tttctgaagg ctgtggaaga ggttgagtg ggcgcattctt agcttgcccc atccccattt
 480
 gaggtctgtc ggagctgccc ttcagtgtga gcatccacaa tgggtacccc agcctcggtg
 540
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 600
 gccaacatct tccaggacgc cgagctgctg cagatccaag cctgttttca acgcagcggg
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 720
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 900
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 960
 ctgatccagg gaaagagcca ggaatggcag tgtcttcctt cttgccaaaa ggctgggga
 1020
 ggtgaaggaa gagagacttt aggcagcag cccaaagggg taaatgaaag caagaggctg
 1080
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 1200
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 1260
 tagatgcagc atttcaccac tcatgctact aatcatctac ctgctactac tgtaaacat
 1320
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 1380
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 1431

<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20				25						30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35				40					45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50					55				60					
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70				75					80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

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          100          105          110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
          115          120          125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
          130          135          140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
145          150          155          160
Pro Ser Gln Val

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<210> 5779

<211> 371

<212> DNA

<213> Homo sapiens

<400> 5779

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gcacacggga atgtgtgcgg gtgtgtgtgc gtgcatgcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtaggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt
240
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccatct gtgcagggtgt gtgggtgtgc
300
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371

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<210> 5780

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5780

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Leu Leu Arg Arg Val Glu Gly Arg Lys Gly Arg Thr His Asp Leu Pro
 1          5          10          15
Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
          20          25          30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
          35          40          45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
          50          55          60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65          70          75          80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
          85          90          95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
          100          105          110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
          115          120

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<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

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 120
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt
 180
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 240
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca
 300
 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga
 360
 tgcagctcag gaaaccaccg gtcactactg gcagtggcgt ggagacatgg aacatggata
 420
 gggcagccgc ctcttgccc ctgatgttca gccacagact cctcccgtca tgggcgaggt
 480
 ctggaggccg gtccagctgt cccagggccca cgcacagcag cctggaagaa gagctggcct
 540
 caggacaggt gttcatgttg tccagagtcc attcccagaa ctctctgtgc ttggccagcc
 600
 aggatagggg tgcccacagg tctgcccgtc agaggctcag gatggccaag tgaggcttac
 660
 ctctgggctc cgtgggacag gcctctccga acagccacat ccagggtggc tgctgcagca
 720
 gaggtggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg
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 840
 ctctg
 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
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 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

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<400> 5783
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120
gctgggactc tccttcttag tacacaccga ctgatttggg gagatcagaa aaatcatgag
180
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240
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300
ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
360
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420
tcccagtcac tacaacaaa tagaggaccc cagccaggaa gaataagggc tgtaggaatt
480
gtaggatttg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa catttctgag
540
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600
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660
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720
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780
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840
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900
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960
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1020
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1080
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1140

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 1260
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 1320
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 aaaaatgaaa taattttattt tgacacatta tttatatata ttctatctag gtttctcttt
 1740
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
			20					25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35				40						45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50				55						60				
Gln	Ile	Val	Phe	Ile	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala	
65				70					75					80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85					90					95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120				125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130				135						140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145				150				155						160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

```

      180              185              190
Glu Leu Ser Lys Ser Ile Ala Asn Lys Ile Lys Asp Lys Gln Gly Asp
      195              200              205
Ile Thr Glu Asp Glu Thr Ile Arg Phe Lys Ser Tyr Leu Leu Ser Met
      210              215              220
Gly Ile Ala Asn Pro Val Thr Arg Glu Thr Tyr Gly Ser Gly Thr Gln
225              230              235              240
Tyr His Met Gln Leu Ala Lys Gln Leu Ala Gly Ile Leu Gln Val Pro
      245              250              255
Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu
      260              265              270
Val Asn Arg Ala Arg Gly Met Glu Leu Leu Ser Pro Glu Asp Leu Val
      275              280              285
Asn Ala Cys Lys Met Leu Glu Ala Leu Lys Leu Pro Leu Arg Leu Arg
      290              295              300
Val Phe Asp Ser Gly Val Met Val Ile Glu Leu Gln Ser His Lys Glu
305              310              315              320
Glu Glu Met Val Ala Ser Ala Leu Glu Thr Val Ser Glu Lys Gly Ser
      325              330              335
Leu Thr Ser Glu Glu Phe Ala Lys Leu Val Gly Met Ser Val Leu Leu
      340              345              350
Ala Lys Glu Arg Leu Leu Leu Ala Glu Lys Met Gly His Leu Cys Arg
      355              360              365
Asp Asp Ser Val Glu Gly Leu Arg Phe Tyr Pro Asn Leu Phe Met Thr
      370              375              380
Gln Ser
385

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<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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120
ccttggccat ggcagcttgg ttgggacagc cgggccaagg gaaaaaaagg tgcaaaagtc
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600

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<210> 5786
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 5786
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 Arg Ser His Ala Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu
 20 25 30
 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala
 35 40 45
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
 50 55 60
 Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro
 65 70 75 80
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
 85 90 95
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp
 100 105 110
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
 115 120 125
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
 130 135 140
 Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser
 145 150 155

<210> 5787
 <211> 1683
 <212> DNA
 <213> Homo sapiens

<400> 5787
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 120
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 240
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1680
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1683

<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

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	20			25		30
Ser Cys Glu Tyr Glu Thr Arg Leu Pro Gly Asn His Ser Thr Ser Gln						
	35			40		45
Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro						
	50			55		60
Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp						
65				70		75
Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val						
	85			90		95
Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val						
	100			105		110
Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu						
	115			120		125
Asp Leu Glu Lys Gly Leu Glu Pro Glu Pro Gln Val Pro Gly Pro Ala						
130				135		140
His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly						
145				150		155
Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln						
	165			170		175
Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val						
	180			185		190
Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro						
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<400> 5790

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<212> DNA

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<212> DNA

<213> Homo sapiens

<400> 5793

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<213> Homo sapiens

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<212> DNA

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<210> 5796

<211> 200

<212> PRT

<213> Homo sapiens

<400> 5796

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Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
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Pro Leu Pro Pro Lys Gly Arg Val Leu Ile His Trp Met Thr Leu Cys
145      150      155      160
Gln Thr Gln Met Lys Leu Met Ala Ile Pro Leu Val Phe Gln Ile Met
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<210> 5797

<211> 405

<212> DNA

<213> Homo sapiens

<400> 5797

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<210> 5798

<211> 109

<212> PRT

<213> Homo sapiens

<400> 5798

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Arg Arg Val Glu Gly Ser Arg Asp Gln Ala Trp Pro Leu Gln Thr Phe
      35      40      45
Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
      50      55      60
Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
      65      70      75      80
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100

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<210> 5799

<211> 4261

<212> DNA

<213> Homo sapiens

<400> 5799

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1380

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<210> 5800

<211> 535

<212> PRT

<213> Homo sapiens

<400> 5800

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4965

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<211> 2418

<212> DNA

<213> Homo sapiens

<400> 5801

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<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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Phe	Glu	Lys	Val	Pro	Leu	Phe	Met	Ser	Arg	Ala	Pro	Ser	Glu	Ile	Asp
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			85						90					95	
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		115					120					125			
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<211> 692

<212> DNA

<213> Homo sapiens

<400> 5803

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120

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<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

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		35					40				45				
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<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

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			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
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Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
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<210> 5807

<211> 1429

<212> DNA

<213> Homo sapiens

<400> 5807

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1429

<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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		20						25					30		
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Trp	Leu	Ala	Ala	Leu	Gln	Asp	Arg	Ser	Ile	Leu	Ala	Pro	Leu	Ala	Trp
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Ala	Glu	Arg	Val	Lys	Ala	Trp	Thr	Ser	Arg	Tyr	Phe	Gly	Val	Leu	Gln
				85					90					95	
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		100						105					110		
Arg	Tyr	Trp	Glu	Pro	Ile	Pro	Lys	Gly	Pro	Val	Leu	Trp	Glu	Ala	Arg
	115						120						125		
Ala	Glu	Pro	Trp	Ala	Thr	Trp	Val	Pro	Leu	Leu	Cys	Phe	Val	Leu	His
	130					135					140				
Val	Ile	Ser	Trp	Leu	Leu	Ile	Phe	Ser	Ile	Leu	Leu	Val	Phe	Asp	Tyr
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His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val
		195					200						205		
Val	Pro	Thr	Leu	Gly	Thr	Asp	Arg	Leu	Leu	Leu	Ala	Phe	Leu	Leu	Thr
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Leu	Tyr	Leu	Gly	Leu	Ala	His	Gly	Leu	Asp	Gln	Gln	Asp	Leu	Arg	Tyr
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Leu	Arg	Ala	Gln	Leu	Gln	Arg	Lys	Leu	His	Leu	Leu	Ser	Arg	Pro	Gln
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 2009

<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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			20					25					30		
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr	Lys
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<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5812

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		20					25					30			
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
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Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
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      180              185              190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
      195              200              205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg
      210              215              220
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225              230              235              240
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys
      245              250              255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala
      260              265              270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
      275              280              285
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Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp
305              310              315              320
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385              390              395              400
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Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn
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<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25					30		
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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 Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
 50 55 60
 Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
 65 70 75 80
 Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
 85 90 95
 Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
 100 105 110
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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

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<212> DNA
<213> Homo sapiens
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<210> 5818
<211> 191
<212> PRT
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<213> Homo sapiens

<400> 5818

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           20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
           35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
           50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
           85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
           100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
           115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
           130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
           165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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300
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420
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480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag cagggaggat gggtgccact
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600

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 720
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 780
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 1080
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 1652

<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
			35				40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
			50			55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70					75				80	
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<211> 3292
<212> DNA
<213> Homo sapiens
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180
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240
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660

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<210> 5822

<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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			20					25				30			
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35				40					45				
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
	50				55				60						
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65				70				75				80			
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85			90					95				
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

4986

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 Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg
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 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe
 580 585 590
 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly
 595 600 605
 Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu
 610 615 620
 Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu
 625 630 635 640
 Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly
 645 650 655
 Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met
 660 665 670
 Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp
 675 680 685
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<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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<210> 5824

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5824

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		20						25					30		
Ala	Ala	Leu	Glu	Lys	Gln	Glu	Lys	Gln	Leu	Glu	Leu	Glu	Ile	Lys	Lys
		35					40					45			
Met	Ala	Lys	Ile	Gly	Asn	Lys	Glu	Ala	Cys	Lys	Val	Leu	Ala	Lys	Gln
50					55					60					
Leu	Val	His	Leu	Arg	Lys	Gln	Lys	Thr	Arg	Thr	Phe	Ala	Val	Ser	Ser
65				70					75					80	
Lys	Val	Thr	Ser	Met	Ser	Thr	Gln	Thr	Lys	Val	Met	Asn	Ser	Gln	Met
			85					90					95		
Lys	Met	Ala	Gly	Ala	Met	Ser	Thr	Thr	Ala	Lys	Thr	Met	Gln	Ala	Val
		100						105					110		
Asn	Lys	Lys	Met	Asp	Pro	Gln	Lys	Thr	Leu	Gln	Thr	Met	Gln	Asn	Phe
		115				120						125			
Gln	Lys	Glu	Asn	Met	Lys	Met	Glu	Met	Thr	Glu	Glu	Met	Ile	Asn	Asp
		130				135				140					
Thr	Leu	Asp	Asp	Ile	Phe	Asp	Gly	Ser	Asp	Asp	Glu	Glu	Glu	Ser	Gln
145				150					155					160	
Asp	Ile	Val	Asn	Gln	Val	Leu	Asp	Glu	Ile	Gly	Ile	Glu	Ile	Ser	Gly
			165					170					175		
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<211> 1479

<212> PRT

<213> Homo sapiens

<400> 5830

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His Gly Leu Gln Gly Cys Leu Glu Ala Gln Gly Gly Gln Val Arg Val
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Thr Pro Ala Cys Asn Thr Ser Leu Pro Ala Gln Arg Trp Lys Trp Val
      65           70           75           80
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Gly Trp Pro Gly Thr Asn Thr Thr Ala Ser Leu Gly Met Tyr Glu Cys
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Asp Arg Glu Ala Leu Asn Leu Arg Trp His Cys Arg Thr Leu Gly Asp
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Gln Leu Ser Leu Leu Leu Gly Ala Arg Thr Ser Asn Ile Ser Lys Pro
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Gly Thr Leu Glu Arg Gly Asp Gln Thr Arg Ser Gly Gln Trp Arg Ile
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Tyr Gly Ser Glu Glu Asp Leu Cys Ala Leu Pro Tyr His Glu Val Tyr
      165          170          175
Thr Ile Gln Gly Asn Ser His Gly Lys Pro Cys Thr Ile Pro Phe Lys
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Tyr Asp Asn Gln Trp Phe His Gly Cys Thr Ser Thr Gly Arg Glu Asp
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Gly His Leu Trp Cys Ala Thr Thr Gln Asp Tyr Gly Lys Asp Glu Arg
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Trp Gly Phe Cys Pro Ile Lys Ser Asn Asp Cys Glu Thr Phe Trp Asp
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Lys Asp Gln Leu Thr Asp Ser Cys Tyr Gln Phe Asn Phe Gln Ser Thr
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Trp Ala Ser Asp Thr Lys Leu Arg Tyr Cys Tyr Lys Val Phe Ser Ser
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Glu Arg Leu Gln Asp Lys Lys Ser Trp Val Gln Ala Gln Gly Ala Cys
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His Phe Val Ala Asn Met Leu Asn Lys Ile Phe Gly Glu Ser Glu Pro
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Glu Ile His Glu Gln His Trp Phe Trp Ile Gly Leu Asn Arg Arg Asp
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Cys Ala Val Leu Asp Leu Ala Ser Leu Gln Trp Val Ala Met Gln Cys

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Gln Glu Ala Glu Tyr Lys Phe Phe Glu His His Ser Thr Trp Ala Gln
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Ala Gln Arg Ile Cys Thr Trp Phe Gln Ala Glu Leu Thr Ser Val His
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Ser Gln Ala Glu Leu Asp Phe Leu Ser His Asn Leu Gln Lys Phe Ser
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Arg Ala Gln Glu Gln His Trp Trp Ile Gly Leu His Thr Ser Glu Ser
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Gln Ala Phe Leu Thr Gln Ala Ala Arg Gly Leu Arg Thr Pro Leu Trp
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Ile Gly Leu Ala Gly Glu Glu Gly Ser Arg Arg Tyr Ser Trp Val Ser
1185          1190          1195          1200
Glu Glu Pro Leu Asn Tyr Val Gly Trp Gln Asp Gly Glu Pro Gln Gln
      1205          1210          1215
Pro Gly Gly Cys Thr Tyr Val Asp Val Asp Gly Ala Trp Arg Thr Thr

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 1250 1255 1260
 Leu Ala Asp Ser Ala Trp Ile Pro Phe Arg Glu His Cys Tyr Ser Phe
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 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
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 1300 1305 1310
 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
 1315 1320 1325
 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln
 1330 1335 1340
 Asp Asn Thr Ala Val Asn Tyr Ser Asn Trp Gly Pro Pro Gly Leu Gly
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 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val
 1380 1385 1390
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
 1395 1400 1405
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
 1410 1415 1420
 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
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<210> 5831

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 5831

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 180
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 240
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 300
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 360
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 420

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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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Arg	Arg	Val	Leu	Val	Thr	Gly	Ala	Thr	Gly	Leu	Leu	Gly	Arg	Ala	Val
		20						25					30		
His	Lys	Glu	Phe	Gln	Gln	Asn	Asn	Trp	His	Ala	Val	Gly	Cys	Gly	Phe
	35					40					45				
Arg	Arg	Ala	Arg	Pro	Lys	Phe	Glu	Gln	Val	Asn	Leu	Leu	Asp	Ser	Asn
	50					55				60					
Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His
65				70					75					80	
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
			85					90					95		
Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala
		100					105						110		
Ala	Ala	Val	Gly	Ala	Phe	Leu	Ile	Tyr	Ile	Ser	Ser	Asp	Tyr	Val	Phe
	115						120					125			
Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu
	130					135					140				
Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
145				150					155					160	
Asn	Asn	Leu	Gly	Ala	Ala	Val	Leu	Arg	Ile	Pro	Ile	Leu	Tyr	Gly	Glu
			165					170						175	
Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
		180						185					190		
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
	195						200					205			
Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu
	210					215					220				
Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly
225					230				235					240	
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala
			245					250						255	
Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
		260						265					270		
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
		275					280					285			
Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
	290					295					300				
Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys	Arg	Trp	Arg	Gln	Thr	Val
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Phe	His														

<210> 5833
 <211> 805
 <212> DNA
 <213> Homo sapiens

<400> 5833
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 120
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 180
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 240
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 360
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 420
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 480
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 600
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 660
 gatgacttaa aagaaagggt tgcaaagatt catatcagtg tatctgaacc tattattcca
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 780
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<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
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 Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
 65 70 75 80
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<210> 5835
<211> 420
<212> DNA
<213> Homo sapiens
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<210> 5836
<211> 140
<212> PRT
<213> Homo sapiens
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5003

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      35                40                45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
      50                55                60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65      70                75                80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
      85                90                95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
      100                105                110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Glu Arg Arg Arg Arg Glu Glu
      115                120                125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
      130                135                140

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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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120
tgggccaaagg gggacatcca gggggcaggg gccgcctccc gccgtgcctt cctgctgggg
180
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240
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300
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360
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420
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480
cgaggaaggg gctgcagttc tccaaggatt cccgcctgct ccagatccc cgggagtcgt
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582

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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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Xaa Arg Leu Ser Pro Phe Leu Pro His Asp His Leu Gly Leu Ala Val
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Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
      20                25                30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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          35          40          45
Ala Gly Ala Ala Ser Arg Arg Ala Phe Leu Leu Gly Val Leu Ala Val
          50          55          60
Gly Leu Gly Val Cys Thr Tyr Ala Ala Ala Leu Val Thr Leu Ala Ala
65          70          75          80
Tyr Leu Ala Ser Arg Asp Pro Pro
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<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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120
cattcgaatg catccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
180
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360
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1080
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1200

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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
		35					40					45			
Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
		50				55					60				
Arg	Arg	Glu	Arg	Glu	Leu	Ser	Trp	Phe	Pro	Phe	His	Leu	Phe	Ser	Gly
65					70				75					80	
Cys	Phe	Lys	Ala	Asn	Ile	Pro	Val	Pro	Asn	Val	Leu	Cys	Gly	Leu	Asn
			85					90					95		
Pro	Gly	Arg	Gly	Gln	Gly	His	Ile	Gln	Val	Gly	Leu	Ala	Ser	Ser	Thr
			100					105					110		
Thr	Phe	Trp	Pro	Gln	Gln	Arg	Met	Gly	Phe	His	Gln	Ser	Leu	Ser	Thr
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Ser	Arg	Phe	Pro	Lys	Glu	Ser	Pro	Arg	Ser						
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841
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420
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<213> Homo sapiens

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Lys	Gln	His	Gln	Ser	Asp	Val	Glu	Ala	Leu	Lys	Arg	Glu	Leu	Gln	Val
			85					90					95		
Leu	Ser	Glu	Gln	Tyr	Ser	Gln	Lys	Cys	Leu	Glu	Ile	Gly	Ala	Leu	Met
		100					105						110		
Arg	Gln	Ala	Glu	Glu	Arg	Glu	His	Thr	Leu	Arg	Arg	Cys	Gln	Gln	Glu
	115					120						125			
Gly	Gln	Glu	Leu	Leu	Arg	His	Asn	Gln	Glu	Leu	His	Gly	Arg	Leu	Ser
	130				135						140				
Glu	Glu	Ile	Asp	Gln	Leu	Arg	Gly	Phe	Ile	Ala	Ser	Gln	Gly	Met	Gly
145				150					155					160	
Asn	Gly	Cys	Gly	Arg	Ser	Asn	Glu	Arg	Ser	Ser	Cys	Glu	Leu	Glu	Val
			165					170					175		
Leu	Leu	Arg	Val	Lys	Glu	Asn	Glu	Leu	Gln	Tyr	Leu	Lys	Lys	Glu	Val
		180					185						190		
Gln	Cys	Leu	Arg	Asp	Glu	Leu	Gln	Met	Met	Gln	Lys	Asp	Lys	Arg	Phe
	195					200					205				
Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

210		215		220
Thr Arg Ser Glu Arg Glu Ile Glu Gln Leu Lys Glu His Leu Arg Leu				
225		230		235
Ala Met Ala Ala Leu Gln Glu Lys Glu Ser Met Arg Asn Ser Leu Ala				
	245		250	255
Glu				

<210> 5847

<211> 1021

<212> DNA

<213> Homo sapiens

<400> 5847

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120
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180
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240
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300
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360
tagacccttt ccctccagag tcacgcacat actcgtcacg gcacacttg ggagaatggt
420
tgtatcttat ggaaggaatt atcacatcaa ggagtcaggg gaaagtgact ggaagcaaac
480
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atcttatctt caaacgctt caactaaaaa acattttcct attaaaatag accttccgaa
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720
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900
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<210> 5848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5848

Gly	Thr	Ser	Ser	Cys	Gly	Arg	Val	Arg	Ala	Cys	Gly	Arg	Ile	His	His
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Asn	Met	Ala	Asn	Leu	Phe	Ile	Arg	Lys	Met	Val	Asn	Pro	Leu	Leu	Tyr
			20					25					30		
Leu	Ser	Arg	His	Thr	Val	Lys	Pro	Arg	Ala	Leu	Ser	Thr	Phe	Leu	Phe
		35					40					45			
Gly	Ser	Ile	Arg	Gly	Ala	Ala	Pro	Val	Ala	Val	Glu	Pro	Gly	Ala	Ala
	50					55					60				
Val	Arg	Ser	Leu	Leu	Ser	Pro	Gly	Leu	Leu	Pro	His	Leu	Leu	Pro	Ala
65					70				75					80	
Leu	Gly	Phe	Lys	Asn	Lys	Thr	Val	Leu	Lys	Lys	Arg	Cys	Lys	Asp	Cys
			85						90					95	
Tyr	Leu	Val	Lys	Arg	Arg	Gly	Arg	Trp	Tyr	Val	Tyr	Cys	Lys	Thr	His
			100					105						110	
Pro	Arg	His	Lys	Gln	Arg	Gln	Met								
		115					120								

<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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120
aaaaatctca agaccacagg acagcgtgag ccccaacccc ctccccaat gaccccagca
180
tgcggtaatg ccaggcgggt ggcccctggg catgcggggg ggagtgatgc atggaaggaa
240
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300
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360
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420
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480
ctcttaccce gcctgggcag ggggctctgc cctgagggcg ggccaaggaa caatggggaa
540
gtttatgtgg acaaaccagt tcccaagcta cttccactt ctccctctc caaccagaag
600
gggggaaaag ggagaggcca cagggcaaag agtgtattag ggctgagct gcagctgcct
660
ctcagaaggg agagtggccc acagccttcc tcccttcacc ttcagcccac tcccagact
720
gcactctggaa gcggttagag gcctgctgag atcctcctct ccctctggcc tcctctogga
780
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840

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gccaaaawyy mmttggtttt ttaaaaaata atcacaattt gtgggttaaa aaccaatttg
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 960
 nattgcagcc ccatctctgt tgttcctta accctctagg gtccctaacc cgatcagtc
 1020
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 1080
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 1320
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 2160
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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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His	Ser	Val	Pro	Ala	Tyr	Pro	Trp	Asp	Trp	Gly	His	Leu	Ile	Arg	Phe
			20					25					30		
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40					45			
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
	50					55				60					
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
65					70				75					80	
Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
			85					90						95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105					110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
		115					120					125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
	130					135					140				
Gln	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Gly	Ala						
145						150									

<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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120
cttggttttg tctcaaaggc aaaaggaaag gacgaggaag gggccaggcc tcccgccagg
180
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240
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300
gacttcata gagttgaggt gggctgccga agtccctttg gtcaatgtga caggagaagc
360
tgctgccatg gttacatcct cagacgtttt attatcaact gtttcacag atgcattcct
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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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Met Trp Lys Gly Leu Val Lys Arg Asn Ala Ser Val Glu Thr Val Asp
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Asn Lys Thr Ser Glu Asp Val Thr Met Ala Ala Ala Ser Pro Val Thr
20           25           30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
35           40           45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
50           55           60
Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
65           70           75           80
Glu Met

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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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120
tcaggcccag cagctccatg gaggacgccg gcgaggaccc caccacgttt gctgcccact
180

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ctctgcccag tgacccccgt ctcttgcca ctgtgaccaa cgcatacctg ggcacacgag
 240
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 300
 gggccatgct gccacgcccc ctcaacgtcc ggctggaggc ccccgaggag atgggggagc
 360
 agctgaccga gaccttcgcc ctggacacca acacaggctc ctttcttcac accctggagg
 420
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 480
 ctttccg
 487

<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

Arg	Glu	Trp	Lys	Val	Gln	Arg	Pro	Glu	Leu	Arg	Glu	Ala	Ser	Gly	Asp
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Tyr	Arg	Arg	Ser	Gln	Glu	Gly	Gly	Pro	Ala	Arg	Pro	Ala	Ala	Pro	Asp
			20					25					30		
Thr	Pro	Ser	Gly	Arg	Ser	Gly	Pro	Ala	Ala	Pro	Trp	Arg	Thr	Pro	Ala
			35				40					45			
Arg	Thr	Pro	Pro	Arg	Leu	Leu	Pro	Thr	Leu	Cys	Pro	Val	Thr	Pro	Val
	50					55					60				
Ser	Trp	Pro	Leu												
65															

<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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 120
 tcctcccgac cctcccgag gcacctgctg ggggctgtgg ggcccaaagc gggagggagt
 180
 taacgaggtt gttgcagaag tcctcctggc ggcacacgaa ggtgtaggag atcagggaga
 240
 ggccggggcc catccggtgc tcagtgaagg ggggctcctg gtccttggcc tccgtgcagg
 300
 ccttgagag caccaggtc acttgggggtc cgctctcaat gagcatcaac gtgtcctggc
 360
 an
 362

<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
          20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
          35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
          50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
          85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
          100           105           110
Ala

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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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120
cgggggcgac cgtcccgggg ccggccggcg aagctgcage gcaactctcg cgggggccag
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360
gaaattgaga atgtggccaa acaatttggg gcacaagtgc atcgaagaag ttctgaagtt
420
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aaagttgcag aaatgattcg agaagaagga tatgattctg ttttctctgt tgtgagacgc
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720
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780
gcatactacg aaatgcgagc tgaacatagt gtggatatag atgtggatat tgattggcct
840

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 960
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 1020
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 1080
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 1140
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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

Met	Asp	Ser	Val	Glu	Lys	Gly	Ala	Ala	Thr	Ser	Val	Ser	Asn	Pro	Arg
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Gly	Arg	Pro	Ser	Arg	Gly	Arg	Pro	Pro	Lys	Leu	Gln	Arg	Asn	Ser	Arg
		20						25					30		
Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
		35					40					45			
Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
	50					55				60					
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65					70				75					80	
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
			85					90					95		
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
			100					105					110		
Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

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Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala
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Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met
145              150              155              160
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His
      165              170              175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
      180              185              190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp
      195              200              205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
      210              215              220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met
225              230              235              240
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile
      245              250              255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
      260              265              270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn
      275              280              285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp
      290              295              300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
305              310              315              320
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser
      325              330              335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala
      340              345              350
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
      355              360              365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
      370              375              380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala
385              390              395              400
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu
      405              410              415
Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys
      420              425              430
Gln Lys

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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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			20					25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
		35					40					45			
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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1951

<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862

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      20           25           30
Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
      35           40           45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
      50           55           60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
      65           70           75           80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
      85           90           95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
      100          105          110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
      115          120          125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
      130          135          140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
      145          150          155          160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
      165          170          175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
      180          185          190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
      195          200          205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
      210          215          220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
      225          230          235          240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
      245          250          255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
      260          265          270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
      275          280          285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
      290          295          300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
      305          310          315          320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
      325          330          335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
      340          345          350
Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
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Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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      405              410              415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420              425              430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435              440              445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450              455              460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465              470              475              480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
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Lys Val

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<210> 5863

<211> 438

<212> DNA

<213> Homo sapiens

<400> 5863

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<210> 5864

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5864

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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
      20              25              30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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1140
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<210> 5866
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 5866
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 20 25 30
 Arg Ala Gly Arg Thr Ala Arg Ala Asn Asn Pro Gly Ile Val Leu Thr
 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
 65 70 75 80
 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
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<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

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<210> 5868

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5868

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		20					25					30			
Trp	Ile	Asn	Phe	Lys	Thr	Ser	Glu	Ala	Asn	Ser	Ala	Arg	Gly	Phe	Gln
	35					40					45				
Ile	Pro	Tyr	Val	Thr	Tyr	Asp	Glu	Asp	Tyr	Glu	Gln	Leu	Val	Glu	Asp
	50				55					60					
Ile	Val	Arg	Asp	Gly	Arg	Leu	Tyr	Ala	Ser	Glu	Asn	His	Gln	Glu	Ile
65					70				75				80		
Leu	Lys	Asp	Lys	Lys	Leu	Ile	Lys	Ala	Phe	Phe	Glu	Val	Leu	Ala	His
			85					90					95		
Pro	Gln	Asn	Tyr	Phe	Lys	Tyr	Thr	Glu	Lys	His	Lys	Glu	Met	Leu	Pro
		100					105					110			
Lys	Ser	Phe	Ile	Lys	Leu	Leu	Arg	Ser	Lys	Val	Ser	Ser	Phe	Leu	Arg
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<210> 5869

<211> 910

<212> DNA

<213> Homo sapiens

<400> 5869

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<210> 5870

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5870

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			20					25					30		
Gly	Ser	Leu	Leu	Ile	Met	His	His	Glu	Ala	Ser	Thr	His	Arg	Val	Ile
		35				40						45			
Pro	Thr	Leu	Val	Gln	Thr	Gly	Leu	His	Gly	Arg	His	Ile	Leu	Gly	Arg
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<211> 2217

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<400> 5871

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<213> Homo sapiens

<400> 5872

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<212> DNA

<213> Homo sapiens

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<400> 5876

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<210> 5880
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 <212> PRT
 <213> Homo sapiens

<400> 5880
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 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
 50 55 60
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
 65 70 75 80
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
 85 90 95
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
 100 105 110
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
 115 120 125
 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
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 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
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<210> 5881
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<210> 5882
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<213> Homo sapiens

<400> 5882

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Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
          35           40           45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
          50           55           60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65           70           75           80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
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Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

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<212> DNA

<213> Homo sapiens

<400> 5883

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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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<210> 5885

<211> 1905

<212> DNA

<213> Homo sapiens

<400> 5885

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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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	35					40				45					
Lys	Ala	Leu	Leu	Ala	Ala	Gly	Ser	Ala	Ala	Met	Ala	Leu	Tyr	Asn	Pro
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Thr	Leu	Lys	Val	Leu	Arg	Asp	Gln	Met	Arg	Arg	Asp	Pro	Glu	Gly	Ala
		85					90						95		
Gln	Ile	Leu	Gln	Glu	Arg	Pro	Arg	Ile	Ser	Thr	Ser	Thr	Leu	Asp	Leu
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Glu	Val	His	Asp	Met	Leu	His	Thr	Leu	Leu	Gly	Met	Pro	Thr	Asn	Ile
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Pro Met Cys Ile Leu Gly Ala Phe Phe Gly Pro Ile Arg Leu Gly Ala					
195		200		205	
Gln Ser Leu Gln Val Leu Val Ser Glu Leu Ile Pro Trp Ala Val Gln					
210	215		220		
Asn Gly Arg Arg Ala Pro Cys Val Leu Asn Leu Tyr Tyr Glu Arg Arg					
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Trp Glu Gln Ser Leu Arg Ala Leu Arg Glu Glu Leu Gly Ile Thr Ala					
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
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Asp	Ile	Pro	Leu	Asp	Glu	Lys	Glu	Ala	Ala	Gln	Trp	Leu	His	Lys	Leu				
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Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln	Glu	Val	Lys	Thr	Leu	Asp	Gly	Met				
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<211> 2198

<212> DNA

<213> Homo sapiens

<400> 5889

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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<210> 5891

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5891

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<400> 5892
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 35 40 45
 Leu Val Met Thr Phe Leu Phe Arg Asn Gly Ser Leu Gln Glu Lys Leu
 50 55 60
 Trp Ala Ile Leu Gln Ala Thr Tyr Ile His Ser Trp Asn Leu Ala Arg
 65 70 75 80
 Phe Val Phe Thr Tyr Lys Gly Leu Arg Ala Leu Gln Ser Tyr Ile Gln
 85 90 95
 Gly Lys Thr Tyr Pro Ala His Ala Phe Leu Ala Ala Phe Leu Gly Gly
 100 105 110
 Ile Leu Val Phe Gly Glu Asn Asn Asn Ile Asn Ser Gln Ile Asn Met
 115 120 125
 Tyr Leu Leu Ser Arg Val Leu Phe Ala Leu Ser Arg Leu Ala Val Glu
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 Lys Gly Tyr Ile Pro Glu Pro Arg Trp Asp Pro Phe Pro Leu Leu Thr
 145 150 155 160
 Ala Val Val Trp Gly Leu Val Leu Trp Leu Phe Glu Tyr His Arg Ser
 165 170 175
 Thr Leu Gln Pro Ser Leu Gln Ser Ser Met Thr Tyr Leu Tyr Glu Asp
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<210> 5893
 <211> 1389
 <212> DNA
 <213> Homo sapiens

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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<212> DNA
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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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			20					25					30		
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				85					90					95	
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
			100					105					110		
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
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	210				215						220				
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
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Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
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Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
65				70					75					80	
Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
			85					90					95		
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
		100					105					110			
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	115					120					125				
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Asp	Met	Ala	Gln	Leu	Arg
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Phe	Tyr	Val	Arg	Gly	Asp
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<212> DNA

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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

<400> 5906

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Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
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Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala
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<210> 5914
 <211> 158
 <212> PRT
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 Gly Gln Gly Phe Asp Arg His Leu Phe Ala Leu Arg His Leu Ala Ala
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 Val Asn Xaa Cys Arg Phe Ala Pro Val Val Ser Asp Ala Phe Gly Val
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 Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr
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<210> 5916
 <211> 152
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 Trp Ile Leu Gln Asp Lys Pro Val Phe Met Glu Glu Pro Asp Arg Lys
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 Asp Val Ala Gln Glu Asp Ala Glu Lys Leu Gly Phe Ser Glu Thr Asp
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 Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser
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 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
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<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
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 Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
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 Arg Glu Ser Ser Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe
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 Gln Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys
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 Gln Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala
 195 200 205
 Gln Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu
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 Arg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys
 225 230 235 240
 His Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu
 245 250 255
 Val Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile
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 Ile Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile
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 His Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile
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 Lys Asn Lys Ala Lys Arg Ser Leu Thr Glu Ser Leu Glu Ser Ile Leu
 325 330 335
 Ser Arg Gly Asn Lys Ala Arg Gly Leu Gln Glu His Ser Ile Ser Val
 340 345 350
 Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu
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 Pro Ser Val Cys Glu Lys Glu Ala Leu Pro Ile Ser Glu Ser Ser Phe
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 Lys Leu Leu Gly Ser Ser Glu Asp Leu Ser Ser Asp Ser Glu Ser His

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<211> 1320

<212> DNA

<213> Homo sapiens

<400> 5919

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<211> 93

<212> PRT

<213> Homo sapiens

<400> 5920

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<212> DNA

<213> Homo sapiens

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<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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<210> 5923

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5923

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<213> Homo sapiens

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<213> Homo sapiens

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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			20					25					30		
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Ser	Thr	Val	Ser	Gln	Ser	Asn	Val	Val	Ile	Ala	Pro	Ala	Ala	Ile	Ala
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Leu	Gly	His	Gly	Thr	Ser	Ser	Pro	Pro	Ala	Pro	Val	Ser	Arg	Leu	Phe
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<210> 5927
<211> 1786
<212> DNA
<213> Homo sapiens
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420
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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Leu Asp Leu Pro Ser Leu Thr Ser Leu Leu Ser Glu Lys Ala Lys Glu			
35	40	45	
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu			
50	55	60	
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser			
65	70	75	80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala			
85	90	95	
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly			
100	105	110	
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr			
115	120	125	
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln			
130	135	140	
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His			
145	150	155	160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala			
165	170	175	
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val			
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Ser Thr Met Glu His Tyr Tyr Thr Ala Phe			
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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606

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<210> 5930
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 <212> PRT
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<400> 5930
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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
 115 120 125
 Gly Ala His His His His His His His His Pro His Pro His His Ala
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<210> 5932
 <211> 109
 <212> PRT
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<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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			20					25					30		
Ser	Lys	Val	Arg	Glu	Gln	Leu	Glu	Gln	Glu	Leu	Glu	Glu	Leu	Thr	Ala
		35				40						45			
Ser	Leu	Phe	Glu	Glu	Ala	His	Lys	Met	Val	Arg	Glu	Ala	Asn	Met	Lys
	50					55					60				
Gln	Ala	Ala	Ser	Glu	Lys	Gln	Leu	Lys	Glu	Ala	Arg	Gly	Lys	Ile	Asp
65					70					75				80	
Met	Leu	Gln	Ala	Glu	Val	Thr	Ala	Leu	Lys	Thr	Leu	Val	Ile	Thr	Ser
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<210> 5935
<211> 2727
<212> DNA
<213> Homo sapiens
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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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			20					25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val	
		35				40				45					
Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
	50				55					60					
Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
65				70					75					80	
Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85					90					95		
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
		100						105				110			
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
	115					120						125			
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Ala Phe Leu Leu Thr Ile Pro Glu Asn Ala Glu Gly His Ile Ile Leu
      20           25           30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
      35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
      50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
      85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
      100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
      115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
      130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
      165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
      180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
      195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
      210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225          230          235          240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
      245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
      260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
      275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
      290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
      325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
      340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
      355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
      370          375          380
Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr
385          390          395          400
Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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240
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300
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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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Cys Lys Arg Lys Glu Gln Glu Gln Lys Glu Arg Ala Leu Gln Pro
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Lys Lys Gln Arg Leu Val Phe Thr Asp Leu Gln Arg Arg Thr Leu Ile
20          25          30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35          40          45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50          55          60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
65          70          75          80
Thr Ala Pro Gly Gly Pro Ala Gly Ala Thr Ala Thr Phe Ser Lys Ala

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85

90

95

<210> 5941
 <211> 2590
 <212> DNA
 <213> Homo sapiens

<400> 5941
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 120
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 180
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 240
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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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Arg	Gln	Ser	Leu	Ala	Leu	Leu	Xaa	Gln	Val	Gly	Val	Gln	Trp	His	Asp
			20					25				30			
Pro	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys

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          35              40              45
Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
          50              55              60
Ala Thr Phe Cys Ile Phe Ser Arg Asp Arg Val Ser Pro Cys Trp Pro
65              70              75              80
Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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120
ggacaacttg ttgtaattgg taaggatgaa tcttatagca agacttctgg ggtttccagc
180
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<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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Ile Val Gly Asn Asp Leu Asp Ser Ala Gln Thr Lys Pro Thr Leu Asp
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Gly Gln Leu Val Val Ile Gly Lys Asp Glu Ser Tyr Ser Lys Thr Ser
          20              25              30
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

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      35              40              45
Thr Lys Pro Gly Ile Leu Cys Cys Phe Gln Asn Glu Phe Glu Asn Pro
  50              55              60
Cys Phe Pro Lys Ser His Phe Ser Val Thr Gln Ala Gly Glu Gln Trp
  65              70              75              80
Arg Asp Leu Ser Ser Pro Gln Pro Pro Pro Arg Phe Lys Gln Phe
      85              90              95
Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp His Arg His Pro Pro Pro
      100              105              110
Arg Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Glu Val Ser Pro Arg
      115              120              125
Ser Arg Ser Pro Asp Leu Met Xaa Ser Ala His Leu Gly Leu Pro Lys
      130              135              140
Cys Trp Asp Tyr Arg Arg Glu Pro Leu Arg Pro Ala Gln Ile Ser Leu
  145              150              155              160
Leu Phe Ser Lys Ser Pro Ser Gln Asp Ile Gln Ala Lys Ala
      165              170

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<210> 5945

<211> 869

<212> DNA

<213> Homo sapiens

<400> 5945

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  120
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  300
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  360
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  420
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  480
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  540
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  600
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  720
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  780
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  869

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<210> 5946
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 5946
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 20 25 30
 Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val Glu Arg
 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
 85 90 95
 Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
 100 105 110
 Glu Gln Leu Lys Glu Glu Arg Glu Leu
 115 120

<210> 5947
 <211> 2283
 <212> DNA
 <213> Homo sapiens

<400> 5947
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 180
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 240
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 300
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 360
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 420
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 480
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2160
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2280
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2283

<210> 5948
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5948
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 Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg
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 Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg
 50 55 60
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<210> 5949
 <211> 4706
 <212> DNA
 <213> Homo sapiens

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 840
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<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
	260	265
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
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Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
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<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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<210> 5952

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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		20					25					30			
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	50				55					60					
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65				70				75					80		
Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
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<210> 5953
<211> 777
<212> DNA
<213> Homo sapiens
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<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

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			20					25					30		
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Arg	Gln	Leu	Xaa	Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu
			50			55					60				
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65				70				75						80	
Asn	Cys	Pro	Glu	Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala
			85					90						95	
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			100					105						110	
Ile	Ser	Glu	Tyr	Glu	Lys	Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser
			115				120						125		
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<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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<210> 5957
<211> 855
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<212> DNA

<213> Homo sapiens

<400> 5957

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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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			20					25					30		
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Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
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Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
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<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 5959
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 120
 ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttggt tgaaagggag
 180
 ctacacagtg ttcatggcta tcctggcact tttgctaatt gtatgcatat tctatcagag
 240
 gaaacctggt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggac
 300
 tcaatgcttt cctcagaagc tgcttgggta tcgcaatata aggatatcac tgacgtggat
 360
 gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggt tataactgac
 420
 aggtataaaa atcttcccac agcttcccg aagcttcagt tcctggagtt acagaaggac
 480
 ttagtagatg attttaggat acgattaaca caagtgatga aagaagagac tagagcttcc
 540
 cttggctttc gatactgtgc aattcttaat gctgtgaact acatctcaac agtactagca
 600
 gattgggctg acaatgtttt ctttctacaa cttcaacagg ctgcactgga ggtgtttgca
 660
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc
 720
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtaagta
 780
 gaccacgttt ttagagaagt taaagatgct gcaaaattgt ataaaaaaga
 830

<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 5960
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 Tyr Asp Asp Asn Leu Phe Cys His Leu Val Asp Glu Val Leu Leu Phe
 20 25 30
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

					85					90					95
Met	Lys	Val	Pro	Asp	Cys	Ala	Glu	Thr	Phe	Met	Thr	Leu	Leu	Leu	Val
			100					105					110		
Ile	Thr	Asp	Arg	Tyr	Lys	Asn	Leu	Pro	Thr	Ala	Ser	Arg	Lys	Leu	Gln
		115					120					125			
Phe	Leu	Glu	Leu	Gln	Lys	Asp	Leu	Val	Asp	Asp	Phe	Arg	Ile	Arg	Leu
		130				135					140				
Thr	Gln	Val	Met	Lys	Glu	Glu	Thr	Arg	Ala	Ser	Leu	Gly	Phe	Arg	Tyr
145					150					155					160
Cys	Ala	Ile	Leu	Asn	Ala	Val	Asn	Tyr	Ile	Ser	Thr	Val	Leu	Ala	Asp
				165					170					175	
Trp	Ala	Asp	Asn	Val	Phe	Phe	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Leu	Glu
			180					185					190		
Val	Phe	Ala	Glu	Asn	Asn	Thr	Leu	Ser	Lys	Leu	Gln	Leu	Gly	Gln	Leu
		195					200					205			
Ala	Ser	Met	Glu	Ser	Ser	Val	Phe	Asp	Asp	Met	Ile	Asn	Leu	Leu	Glu
		210				215					220				
Arg	Leu	Lys	His	Asp	Met	Leu	Thr	Arg	Gln	Val	Asp	His	Val	Phe	Arg
225					230					235					240
Glu	Val	Lys	Asp	Ala	Ala	Lys	Leu	Tyr	Lys	Lys					
				245					250						

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<210> 5961
<211> 585
<212> DNA
<213> Homo sapiens
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<400> 5961
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60
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120
aattagagac tgagacaggg caggggtgccg aggtgtctgc atgcgtttca tgtggatgcc
180
cgtgtctatt ctggcctgct cctggggccc ctccccactc agccctggct gatgagaatg
240
ggacagggac tcccttctcg tgtccctgtg cagcgtcggc ccaggaggta gcagagcagt
300
atatgcacat ctgggtgtgc cctcctgcat gtccccacac atctgtcatt cctgtctttg
360
cacacctatg tgactcccg c atgttttgtgt ccttatgtgt cccatgcatg ctccccatct
420
gaccttgctg gttctcgcgt gtctgtgtgc ggccagtcct gccttcactc tctcatgggt
480
ggccctggca gcatgtctgg ctccccagca ggtgagctca ggagataaga tggaagatgc
540
aacagccaat ggtcaagaag actccaaggc ccagatggg tccac
585

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 5962

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Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
          100          105          110
Pro Ser

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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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atggggctgt ttgaaagac ccaggagaag ccgccc aaag aactggtcaa tgagtgggtca
60
ttgaagataa gaaaggaaat gagagttggt gacaggcaaa taagggatat ccaaagagaa
120
gaagaaaaag tgaaacgatac tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
180
atagttctgg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
360
ccagagattc aggccaccat gagggagttg tccaaagaaa tgatgaaggc tgggatcata
420
gaggagatgt tagaggacac ttttgaaagc atggacgatc aggaagaaat ggaggaagaa
480
gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
540
cccagtaaag tgactgatgc cctccagag ccagaacctc caggagcgat ggctgcctca
600
gaggatgagg aggaggagga agaggctctg gagggcatgc agtccccggt ggccacactc
660
cgcagctagg ggctgcctac cccgctgggt gtgcacacac tcctctcaag agctgccatt
720
ttatgtgtct cttgcactac acctctgttg tgaggactac cattttggag aaggttctgt
780
ttgtctcttt tcattctctg ccaggtttt gggatcgcaa agggattggt cttataaaag
840
tggcataaat aaatgcatca tttttaggag tatagacaga tatatcttat tgtggggagg
900

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ggaaagaaat ccattctgctc atgaagcact tctgaaaata taggtgattg cctgaatgtc
 960
 gaagactcta cttttgtcta taaaacacta tataaatgaa ttttaataaa tttttgcttc
 1020
 agcattggc cccattgtag attgcctgt gcagtaaact ttcaagggtg cagctgcccc
 1080
 agattgcttc atttgctggg tgtggaaaga gttgctatgg ccaggcatat gggatttgga
 1140
 agctcagcag aagtgacttc tgctctgtgg ttgctgctcc cgggctttca cagacatggg
 1200
 atggcagcca ttcttttacc tattttaacca agaggatgct ggggaattgt gctgcttgct
 1260
 ctgttggtg gtggctgcat tatgtccg
 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

Met	Gly	Leu	Phe	Gly	Lys	Thr	Gln	Glu	Lys	Pro	Pro	Lys	Glu	Leu	Val
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Asn	Glu	Trp	Ser	Leu	Lys	Ile	Arg	Lys	Glu	Met	Arg	Val	Val	Asp	Arg
			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
		35				40						45			
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55				60					
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70						75				80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
		115					120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135						140			
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145				150					155					160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165						170					175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
		180						185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
	195					200						205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215						220			

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965
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 ccgcgccgct ccctgtacaa actggtgggc tcgccgcctt ggaaagaggc tttccggcag
 120
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct
 180
 ggaagcagtg ggccaggga ttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
 gagtggaaatg ctttgcagnn tcagtgggag aattgtccag aagacttggc tcagttggag
 300
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
 360
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
 420
 ctggctgagt gggaggcaaa cccactcatc tgtcctgtat gtacaaagta caacctgaga
 480
 atcacaagcg gtgtgggtgt gtgtcagtg ggccgtgtcca tccatctca ttcttctgag
 540
 ttgacagagc agaagcttcg tgctgttta gagggtagta taaatgagca cagtgcacat
 600
 tgtccccaca cactgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
 660
 atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca
 720
 tcattctatg gggttgaaga caactcatc cctctgagga gccttgata tacaagcctt
 780
 ttatttataa cttattttgt attgaaactt ttaaacaata ctgaagaaaa aaaaactttt
 840
 ccgacatctg ttcttggctt tttgtgacgc aggttgaagg gggaggaata gaaaaagaca
 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
 960
 taatagattt gtacagaaaa aaatgataat aaatgagaac aaaaaacata t
 1011

<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

Gly	Asn	Gly	Ser	Cys	Gly	Phe	Val	Ser	Arg	Glu	Glu	Glu	Met	Ala	Glu
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Ser	Leu	Arg	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Lys	Leu	Val	Gly	Ser	Pro
			20					25				30			
Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg	Met	Arg	Asn
		35					40				45				
Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly	Ser	Ser	Gly
	50					55				60					
Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val	Met	Glu	Glu
65				70					75				80		
Glu	Trp	Asn	Ala	Leu	Gln	Xaa	Gln	Trp	Xaa	Asn	Cys	Pro	Glu	Asp	Leu

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<210> 5967
<211> 1806
<212> DNA
<213> Homo sapiens
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<400> 5967
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120
tgtgtcttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa
180
atctttttcct ctatttttaga aatggatttc aatggtggtc agtttgtttg cagaaacctt
240
ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc
300
acttctctcac taatatcagg gcttattttg atatttgaat ggtggtattt tcgcaaatac
360
ggaacttcat tcattgaaca agtctcagta agccacttgc gcccccttct gggagggggt
420
gacaacaact ctccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa
480
agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac
540
aatcggtata cttgggtgac aggacgagag cctcttactt actatgacat gaatctctct
600
gccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca
660
ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agctcatgaa
720
gccttggaga taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
780
aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca
840

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tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
 900
 acaatatgct acacagctgc tttgctcaaa gcaagagctg tctctgacaa attctctcct
 960
 gaggtgcat ctggcgggg gctgagcaca gcagagatga atgcagtaga ggccattcat
 1020
 agagctgtgg aattcaatcc tcatgtgcc aaatacctac tagaaatgaa aagcttaate
 1080
 ctacccccag aacatatact gaagagagga gacagtgaag caatagcata tgcattcttt
 1140
 catcttgac actggaagag agtgaaggg gctttgaate ttttgattg tacgtgggaa
 1200
 ggcacttttc ggatgatccc ttatcccttg gaaaaggggc acctatttta tccttaccga
 1260
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 1320
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 1380
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 1440
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 1500
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 1560
 accatttaat tttcatgatc gtcaatggaa tcaaagcatt aagggtcaaa tgagaaagtg
 1620
 caggttgta ctgcatgcct tgccctcatt cacaacaaat tcttagcagt tccaaaaaa
 1680
 tgcaggaggt ccaaaaggat ggaatgattt aggaatcct agcaaagaa aatgtgtggg
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 ctttcc
 1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55				60					
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70					75					80
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85					90					95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

			100					105					110				
Tyr	Asn	Arg	Tyr	Thr	Trp	Val	Thr	Gly	Arg	Glu	Pro	Leu	Thr	Tyr	Tyr		
		115						120					125				
Asp	Met	Asn	Leu	Ser	Ala	Gln	Asp	His	Gln	Thr	Phe	Phe	Thr	Cys	Asp		
	130					135					140						
Ser	Asp	His	Leu	Arg	Pro	Ala	Asp	Ala	Ile	Met	Gln	Lys	Ala	Trp	Arg		
145					150					155					160		
Glu	Arg	Asn	Pro	Gln	Ala	Arg	Ile	Ser	Ala	Ala	His	Glu	Ala	Leu	Glu		
				165						170				175			
Ile	Asn	Glu	Thr	Arg	His	Gln	Cys	Leu	Gly	Val	His	Gln	Lys	Lys	Ala		
		180							185				190				
Ser	Asn	Val	Cys	Gln	Lys	Thr	Arg	Glu	Asp	Gln	Gly	Ser	Lys	Ala	Leu		
	195						200					205					
Leu	Glu	Leu	Gln	Ala	Tyr	Ala	Asp	Val	Gln	Ala	Val	Leu	Ala	Lys	Tyr		
	210					215					220						
Asp	Asp	Ile	Ser	Leu	Pro	Lys	Ser	Ala	Thr	Ile	Cys	Tyr	Thr	Ala	Ala		
225					230					235					240		
Leu	Leu	Lys	Ala	Arg	Ala	Val	Ser	Asp	Lys	Phe	Ser	Pro	Glu	Ala	Ala		
			245						250				255				
Ser	Arg	Arg	Gly	Leu	Ser	Thr	Ala	Glu	Met	Asn	Ala	Val	Glu	Ala	Ile		
		260						265					270				
His	Arg	Ala	Val	Glu	Phe	Asn	Pro	His	Val	Pro	Lys	Tyr	Leu	Leu	Glu		
		275					280					285					
Met	Lys	Ser	Leu	Ile	Leu	Pro	Pro	Glu	His	Ile	Leu	Lys	Arg	Gly	Asp		
	290					295					300						
Ser	Glu	Ala	Ile	Ala	Tyr	Ala	Phe	Phe	His	Leu	Ala	His	Trp	Lys	Arg		
305					310					315					320		
Val	Glu	Gly	Ala	Leu	Asn	Leu	Leu	His	Cys	Thr	Trp	Glu	Gly	Thr	Phe		
			325						330					335			
Arg	Met	Ile	Pro	Tyr	Pro	Leu	Glu	Lys	Gly	His	Leu	Phe	Tyr	Pro	Tyr		
		340						345					350				
Pro	Ile	Cys	Thr	Glu	Thr	Ala	Asp	Arg	Glu	Leu	Leu	Pro	Ser	Phe	His		
	355						360					365					
Glu	Val	Ser	Val	Tyr	Pro	Lys	Lys	Glu	Leu	Pro	Phe	Phe	Ile	Leu	Phe		
	370					375					380						
Thr	Ala	Gly	Leu	Cys	Ser	Phe	Thr	Ala	Met	Leu	Ala	Leu	Leu	Thr	His		
385					390					395					400		
Gln	Phe	Pro	Glu	Leu	Met	Gly	Val	Phe	Ala	Lys	Ala	Val	Ser	Val	Cys		
			405						410					415			
Leu	Glu	Gly	Gly	Leu	Gly	Glu	Trp	Met	Gly	Lys	Ala	Lys	Gly	Ile	Lys		
			420					425					430				
Ala	Ala																

<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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ctggggcgggc gggaaggggt cccggatctg cagcctgggg tcttggccag ccaggccatg
120

attgagaaga tcctgagcga ggacccccgg tggcaagatg ccaacttcgt gctggggcagc
 180
 tacaagacgg agcagtgccc gaagccgcca cgctgtgcc gccagggcta tgcgtgccc
 240
 cactaccaca atagccggga caggcggcgc aacccccggc ggttcagta caggtccacg
 300
 ccctgcccc gcgtaagca cggggatgag tggggggaac cctcacgctg cgatggcggc
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 420
 tctacaaaa
 429

<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

Arg	Pro	Pro	Val	Cys	Asp	Val	Arg	Glu	Leu	Gln	Ala	Gln	Glu	Ala	Leu
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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
			20					25				30			
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
		35				40					45				
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50					55					60				
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65					70					75				80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85					90						95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
			100					105					110		
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
		115				120					125				
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
	130					135					140				

<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
 catgtccctt aggtcagcta agcccacatc agtgtccaaa taggcaacat ccctatttta
 180
 tagatgggtca tccccatttt agagatagct cccttttata tccccatttt acaggtgaag
 240
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 360
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 420
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<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25				30			
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
			35				40				45				
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
		50				55				60					
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70					75				80		
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
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<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 360
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<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

Met	Glu	Gly	Ser	Gly	Thr	Gly	Lys	Arg	Arg	Gly	Lys	Ala	Ala	Lys	Thr
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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20					25					30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
			35				40					45			
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
			50				55				60				
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65					70					75				80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
				85					90					95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
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<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 180
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 240
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<210> 5976

<211> 564

<212> PRT

<213> Homo sapiens

<400> 5976

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			20					25					30		
Asp	Leu	Ala	Tyr	Glu	Arg	Gln	Tyr	Glu	Gln	Gln	Thr	Tyr	Gln	Val	Ile
			35					40					45		
Pro	Glu	Val	Ile	Lys	Asn	Phe	Ile	Gln	Tyr	Phe	His	Lys	Thr	Val	Ser
			50			55					60				
Asp	Leu	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Leu	Gln	Ala	Ser	Arg	Val	Ser
65					70					75				80	
Ser	Asp	Val	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Ile	Gln	Asp	Ile	Tyr	Glu
				85					90					95	
Asn	Ser	Trp	Thr	Lys	Leu	Thr	Glu	Arg	Phe	Phe	Lys	Asn	Thr	Pro	Trp
			100					105					110		
Pro	Glu	Ala	Glu	Ala	Ile	Ala	Pro	Gln	Val	Gly	Asn	Asp	Ala	Val	Phe
			115					120					125		
Leu	Ile	Leu	Tyr	Lys	Glu	Leu	Tyr	Tyr	Arg	His	Ile	Tyr	Ala	Lys	Val
			130					135					140		
Ser	Gly	Gly	Pro	Ser	Leu	Glu	Gln	Arg	Phe	Glu	Ser	Tyr	Tyr	Asn	Tyr
145					150					155				160	
Cys	Asn	Leu	Phe	Asn	Tyr	Ile	Leu	Asn	Ala	Asp	Gly	Pro	Ala	Pro	Leu
				165					170					175	
Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
			180					185					190		
Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
			195					200					205		
Glu	Glu	Glu	Ile	Asp	Phe	Leu	Arg	Ser	Asn	Pro	Lys	Ile	Trp	Asn	Val
			210				215					220			
His	Ser	Val	Leu	Asn	Val	Leu	His	Ser	Leu	Val	Asp	Lys	Ser	Asn	Ile
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			260					265					270		
Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
			275				280					285			
Gln	Ala	Ile	Lys	Val	Leu	Glu	Asn	Ile	Glu	Leu	Asn	Lys	Lys	Ser	Met
			290				295				300				
Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
305					310					315				320	
Phe	Ala	Tyr	Leu	Met	Met	Arg	Arg	Tyr	Gln	Asp	Ala	Ile	Arg	Val	Phe

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Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met His
          355          360          365
Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp Glu
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Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu Arg
385          390          395          400
Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser
          405          410          415
Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His
          420          425          430
Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser
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Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu
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Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp
465          470          475          480
Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys
          485          490          495
Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu
          500          505          510
Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile
          515          520          525
His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile
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<210> 5977

<211> 2320

<212> DNA

<213> Homo sapiens

<400> 5977

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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
	50					55					60				
Trp	Trp	Tyr	Thr	Pro	Val	Ile	Pro	Ala	Thr	Gln	Glu	Ala			
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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<210> 5980

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5980

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			20					25				30			
Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Gln	Asn
		35				40					45				
Thr	His	Leu	Val	Leu	Ile	Cys	Tyr	Asp	Val	Met	Asn	Pro	Thr	Ser	Tyr
	50				55					60					
Asp	Asn	Val	Leu	Ile	Lys	Trp	Phe	Pro	Glu	Val	Thr	His	Phe	Cys	Arg
65				70					75					80	
Gly	Ile	Pro	Met	Val	Leu	Ile	Gly	Cys	Lys	Thr	Asp	Leu	Arg	Lys	Asp
			85					90						95	
Lys	Glu	Gln	Leu	Arg	Lys	Leu	Arg	Ala	Ala	Gln	Leu	Glu	Pro	Ile	Thr
		100						105				110			
Tyr	Met	Gln	Gly	Leu	Ser	Ala	Cys	Glu	Gln	Ile	Arg	Ala	Ala	Leu	Tyr
		115				120					125				
Leu	Glu	Cys	Ser	Ala	Lys	Phe	Arg	Glu	Asn	Val	Glu	Asp	Val	Phe	Arg
	130				135						140				
Glu	Ala	Ala	Lys	Val	Ala	Leu	Ser	Ala	Leu	Lys	Lys	Ala	Gln	Arg	Gln
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Lys	Lys	Arg	Arg	Leu	Cys	Leu	Leu	Leu							
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<210> 5981

<211> 677

<212> DNA

<213> Homo sapiens

<400> 5981

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<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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Arg	Ile	Pro	Lys	Ser	Asp	Asp	Gly	Thr	Arg	Thr	Gly	Arg	Asn	Asp	Ser
		20						25				30			
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35					40					45			
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50					55				60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
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Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
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Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
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Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
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Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85					90					95		
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Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
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180

185

<210> 5985

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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 240
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 420
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<210> 5986

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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 20 25 30
 Asp Leu Leu Gln Asn Pro Tyr Phe Ser Lys Leu Leu Asn Leu Ser
 35 40 45
 Gln His Val Asp Glu Ser Gly Leu Ser Leu Thr Leu Ala Lys Glu Gln
 50 55 60
 Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg
 65 70 75 80
 Ser Glu Ile Leu His Arg Val Ile Gln Glu Leu Leu Val Asp Tyr Tyr
 85 90 95
 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

	100		105		110
Glu Thr Leu	Glu Gln Arg Leu Leu Val Thr Glu	Leu Met Arg Leu Leu			
	115		120		125
Gly Pro Ser	Gln Glu Arg Glu Ile Pro Pro Leu	Leu Gly Leu Glu Lys			
	130		135		140
Ala Asp Leu	Leu Glu Leu Met Pro Leu Ser Glu	Val Gly Gly Glu Ile			
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Leu Glu Pro	Asn Lys				
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<210> 5987

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5987

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1140

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<210> 5988
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 <212> PRT
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<400> 5988
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 35 40 45
 Trp Ile Lys Ala Arg Ser Gly Asp Asn Pro Val Tyr Ile Trp Gly His
 50 55 60
 Ser Leu Gly Thr Gly Val Ala Thr Ile Trp Cys Gly Ala Ser Val Ser
 65 70 75 80
 Glu Thr Pro Pro Asp Ala Leu Ile Leu Glu Ser Pro Phe Thr Asn Ile
 85 90 95
 Arg Glu Glu Ala Lys Ser His Pro Phe Ser Val Ile Tyr Arg Tyr Phe
 100 105 110
 Pro Gly Phe Asp Trp Phe Phe Leu Asp Pro Ile Thr Ser Ser Gly Ile
 115 120 125
 Lys Phe Ala Asn Asp Glu Asn Val Lys His Ile Ser Cys Pro Leu Leu
 130 135 140
 Ile Leu His Ala Glu Asp Asp Pro Val Val Pro Phe Gln Leu Gly Arg
 145 150 155 160
 Lys Leu Tyr Ser Ile Ala Ala Pro Ala Arg Ser Phe Arg Asp Phe Lys
 165 170 175
 Val Gln Phe Val Pro Phe His Ser Asp Leu Gly Tyr Arg His Lys Tyr
 180 185 190
 Ile Tyr Lys Ser Pro Glu Leu Pro Arg Ile Leu Arg Glu Phe Leu Gly
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 Lys Ser Glu Pro Glu His Gln His
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<210> 5989
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 <212> DNA
 <213> Homo sapiens

<400> 5989

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240
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<210> 5990
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 5990
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 20 25 30
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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Glu Gly Val Leu Arg Leu Leu Glu His Gly
 65 70 75 80
 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
 85 90 95
 Thr Ile Pro Trp Val Glu Leu Gly Gly Lys Val Ser Ile Asn Cys Ala
 100 105 110
 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
 115 120 125
 Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
 130 135 140
 Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
 145 150 155 160
 Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
 165 170 175
 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
 180 185 190
 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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 Lys Tyr Phe Ile Gln Glu Gly Asp Gly Trp Val Tyr Phe Asn Pro Leu
 245 250 255
 Trp Lys Ala His
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<210> 5991
 <211> 2440
 <212> DNA
 <213> Homo sapiens

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<210> 5992

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5992

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Val	Val	Phe	Asp	Glu	Ala	Asp	Arg	Leu	Phe	Glu	Met	Gly	Phe	Ala	Glu
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Ala	Ala	Val	Leu	Leu	His	Leu	Leu	His	Asn	Val	Val	Arg	Pro	Gln	Asp
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Gln	Thr	Val	Val	Phe	Val	Ala	Thr	Lys	His	His	Ala	Glu	Tyr	Leu	Thr
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Glu	Leu	Leu	Thr	Thr	Gln	Xaa	Val	Ser	Cys	Ala	His	Ile	Tyr	Ser	Ala
145				150				155						160	
Leu	Asp	Pro	Thr	Ala	Arg	Lys	Ile	Asn	Leu	Ala	Lys	Phe	Thr	Leu	Gly
			165					170				175			
Lys	Cys	Ser	Thr	Leu	Ile	Val	Thr	Asp	Leu	Ala	Ala	Arg	Gly	Leu	Asp
			180					185				190			
Ile	Pro	Leu	Leu	Asp	Asn	Val	Ile	Asn	Tyr	Ser	Phe	Pro	Ala	Lys	Gly

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Lys	Leu Phe Leu His Arg Val Gly Arg Val Ala Arg Ala Gly Arg Ser				
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Gly	Thr Ala Tyr Ser Leu Val Ala Pro Asp Glu Ile Pro Tyr Leu Leu				
	225		230		235
Asp	Leu His Leu Phe Leu Gly Arg Ser Leu Xaa Pro Arg Pro Thr Pro				
		245		250	255
Gln	Gly Ala Leu Arg Cys Gly Arg Cys Gly Trp His Ala Gly Ser Gly				
		260		265	270
Ala	Thr Glu Cys Gly Gly Arg Gly Gly Gln Trp Ser Ala Glu His Pro				
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Gly	Gly Ile Ala Gly Ala Thr Gly Pro Gly Pro Arg Cys				
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<210> 5993

<211> 7858

<212> DNA

<213> Homo sapiens

<400> 5993

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Lys	Glu	Lys	Met	Phe	Thr	Ile	Leu	Glu	Arg	Thr	Val	Thr	Thr	Arg	Ile
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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
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325	330	335
Asp Leu Ala Ser Glu Asp	Leu Glu Ala Asn Glu	Ile Val Ser Leu Leu
340	345	350
Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
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Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
370	375	380
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435	440	445
Gln Val Ala Ala Gln Ile	Ser Glu Asp Leu Lys	Thr Lys Val Leu Val
450	455	460
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465	470	475
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485	490	495
Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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Lys Glu Ser Ile Val Ser	Leu Lys Arg Lys Tyr	Leu Lys Asn Glu Val
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Asp Leu Glu Gln His Leu	Asn Glu Leu Met Thr	Lys Lys Trp Leu Leu
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580	585	590
Asn Asp Phe Ala Lys Ile	Lys Lys Pro Tyr Lys	Lys Arg Met Thr Ala
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
610	615	620
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Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
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Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
690	695	700
Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

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<210> 6001

<211> 2490

<212> DNA

<213> Homo sapiens

<400> 6001

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<210> 6002

<211> 263

<212> PRT

<213> Homo sapiens

<400> 6002

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<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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 <212> DNA
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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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Lys	Gly	Gln	Lys	Gly	Asp	Pro	Gly	Glu	Pro	Gly	Pro	Ala	Gly	Leu	Lys
			20					25					30		
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
		35					40					45			
Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
		50				55					60				
Gly	Ser	Ala	His	Ser	Glu	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro
65					70					75				80	
Gly	Pro	Met	Gly	Leu	Gln	Gly	Ile	Gln	Gly	Pro	Lys	Gly	Leu	Asp	Gly
			85						90				95		
Ala	Lys	Gly	Glu	Lys	Gly	Ala	Ser	Gly	Glu	Arg	Gly	Ser	Ser	Gly	Leu
			100						105				110		
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
			115					120					125		
Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
		130					135					140			
Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
145					150					155				160	
Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
				165					170					175	
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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Thr	Ser	Asp	Gly	Ala	Ile	Ser	Val	Pro	Ser	Leu	Ser	Ala	Pro	Gly	Gln
		20					25				30				
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35				40				45					
Ser	Ser	Thr	Asn	Thr	Val	Gly	Ala	Thr	Val	Asn	Ser	Gln	Ala	Ala	Gln
	50				55				60						
Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
65				70				75						80	
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
			85					90						95	
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
		100					105					110			
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115				120				125					
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
	130				135					140					
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
145				150				155						160	
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<210> 6009
<211> 1570
<212> DNA
<213> Homo sapiens
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 1380
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<210> 6010

<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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His	Ser	Gly	Pro	Leu	Ala	Val	Leu	Ala	Gln	Val	Val	Arg	Arg	Ser	Thr
			20					25					30		
Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala
		35					40					45			
Ala	Met	Ala	Cys	Ala	Leu	Gly	Tyr	Asp	Ile	His	Phe	His	Asp	Lys	Lys
	50					55					60				
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser
65				70					75					80	
Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
			85					90					95		
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr
			100					105					110		
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
		115				120					125				
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130					135				140					
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
145					150					155				160	
Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp
			165					170					175		
Pro	Cys	Pro	Phe	Pro	Met	Ala	Asp	Ser	Ser	Pro	Trp	Val	His	Ile	Thr
			180					185					190		
Leu	Gly	Asp	Gly	Ser	Thr	Phe	Gln	Thr	Lys	Leu	Leu	Ile	Gly	Ala	Asp
		195				200						205			
Gly	His	Asn	Ser	Gly	Val	Arg	Gln	Ala	Val	Gly	Ile	Gln	Asn	Val	Ser
	210					215					220				
Trp	Asn	Tyr	Asp	Gln	Ser	Ala	Val	Val	Ala	Thr	Leu	His	Leu	Ser	Glu
225				230					235					240	
Ala	Thr	Glu	Asn	Asn	Val	Ala	Trp	Gln	Arg	Phe	Leu	Pro	Ser	Gly	Pro
			245					250					255		
Ile	Ala	Leu	Leu	Pro	Leu	Ser	Asp	Thr	Leu	Ser	Ser	Leu	Val	Trp	Ser

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 Thr Ser His Glu His Ala Ala Glu Leu Val Ser Met Asp Glu Glu Lys
 275 280 285
 Phe Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr
 290 295 300
 Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu
 305 310 315 320
 Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro
 325 330 335
 Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His
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 Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala
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 His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly
 370 375 380
 Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly
 385 390 395 400
 Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg
 405 410 415
 Gln Arg His Asn Thr Ala Leu Leu Ala Thr Asp Leu Leu Lys Arg
 420 425 430
 Leu Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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Val	Phe	Ser	Lys	Gly	Val	Arg	Glu	Val	Glu	Arg	Val	Leu	Gln	Leu	Pro
			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
		35					40					45			
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
		50				55					60				
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
65					70					75					80
Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
			85						90					95	
Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100					105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
		115					120					125			
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
		130				135						140			
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
145					150					155					160
Asn	Ala	Phe	Lys	Lys	Thr	Ala	Tyr	Glu	Leu	Leu	Asp	Glu	Lys	Leu	Leu

5190

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<210> 6014

<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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			20					25				30			
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35					40				45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55				60					
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70				75					80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85					90					95		
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro His Phe Gln Ser
          115          120          125
Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Gly Asp Ser Asn Pro Asn
          130          135          140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145          150          155          160
His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val
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<210> 6015
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 <212> DNA
 <213> Homo sapiens

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<400> 6015
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612

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<210> 6016
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 6016
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20     25     30
Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
35     40     45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp	Ser Gln Lys Pro Ala			
65		70		75
Phe Tyr Asn Ile Phe Leu Lys Lys Ser His Ser	Phe Gln Ser Leu Leu			
	85		90	95
Gln Tyr Ile				

<210> 6017

<211> 2091

<212> DNA

<213> Homo sapiens

<400> 6017

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1200

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<210> 6018

<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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Thr	Ile	Gln	Met	Lys	Ser	Thr	Asp	Ile	Leu	Tyr	Arg	Leu	Gln	Met	Ser
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Lys	Ala	Lys	Ala	Ile	Val	Ala	Gly	Asp	Glu	Val	Ile	Gln	Glu	Val	Asp
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Val Lys Ala Phe Val Val	Leu Ala Ser Gln Phe Leu Ser His Asp Pro			
465	470	475		480
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<211> 3002

<212> DNA

<213> Homo sapiens

<400> 6019

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<210> 6020

<211> 387

<212> PRT

<213> Homo sapiens

<400> 6020

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      305             310             315             320
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<212> DNA

<213> Homo sapiens

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<211> 708

<212> PRT

<213> Homo sapiens

<400> 6022

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Gly	Glu	Ser	Gln	Pro	Asn	Pro	Lys	Thr	Val	Glu	Leu	Leu	Ser	Gly	Val
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Val	Asp	Gln	Thr	Lys	Asp	Gly	Leu	Ile	Ser	Phe	Gln	Glu	Phe	Val	Ala
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Tyr Lys Leu Ala Val Ala Thr Phe Ala Gly Ile Glu Asn Lys Phe Gly
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<210> 6023

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 6023

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<211> 100

<212> PRT

<213> Homo sapiens

<400> 6024

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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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Ser	Glu	Arg	Arg	Leu	Gln	Gly	His	Arg	Gln	Glu	Val	Cys	Gly	Leu	Lys
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Trp	Ser	Thr	Asp	His	Gln	Leu	Leu	Ala	Ser	Gly	Gly	Asn	Asp	Asn	Lys
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Glu	His	Leu	Ala	Ala	Val	Lys	Ala	Ile	Ala	Trp	Ser	Pro	His	Gln	His
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Gln	Val	Cys	Asn	Leu	Ala	Trp	Ser	Lys	His	Ala	Asn	Glu	Leu	Val	Ser
			405						410					415	
Thr	His	Gly	Tyr	Ser	Gln	Asn	Gln	Ile	Leu	Val	Trp	Lys	Tyr	Pro	Ser
		420						425					430		
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 <212> DNA
 <213> Homo sapiens

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<210> 6028
 <211> 75
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<400> 6028
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120

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<212> PRT

<213> Homo sapiens

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<210> 6031

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<212> DNA

<213> Homo sapiens

<400> 6031

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<211> 321

<212> PRT

<213> Homo sapiens

<400> 6032

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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Asp	Leu	Asp	Thr	Glu	Gly	Arg	Tyr	Leu	Phe	Leu	Asn	Ala	Ile	Ala	Asn				
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Gly	Leu	Leu	Ile	Thr	Phe	Ile	Glu	Leu	Ile	Lys	Asn	Pro	Ala	Phe	Lys				
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Phe	Trp	Asn	His	Glu	Phe	Val	His	Cys	Ala	Pro	Glu	Ile	Glu	Lys	Leu				
			1060					1065					1070						
Phe	Gln	Ser	Val	Ala	Gln	Cys	Cys	Met	Gly	Gln	Lys	Gln	Ala	Gln	Gln				
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<211> 320

<212> DNA

<213> Homo sapiens

<400> 6035

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<210> 6036

<211> 102

<212> PRT

<213> Homo sapiens

<400> 6036

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Arg	Gln	Val	Leu	Gln	Glu	Pro	Ser	Arg	Glu	Pro	Pro	Gly	Trp	Leu	Gly
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Ala	Trp	Pro	Arg	Ser	Gln	Ser	His	Asn	Ala	His	His	Cys	Pro	Thr	Met
	50				55						60				
Pro	Phe	Arg	Met	Glu	Pro	Leu	Ile	His	Trp	Ala	His	Ser	His	Gly	Gln
65				70				75						80	
Arg	Asp	Tyr	Pro	Trp	Thr	Met	Ile	Glu	Thr	Leu	Pro	Ile	Pro	Gln	Thr
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<210> 6037

<211> 3910

<212> DNA

<213> Homo sapiens

<400> 6037

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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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			20					25					30		
His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
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Gly	Tyr	Val	His	Pro	Asp	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln	
	50					55				60					
Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
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Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
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Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
			100					105					110		
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	130					135					140				
Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
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Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
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Thr	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu	
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Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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 <212> DNA
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Gln Asn Val	Val Pro Glu Ala	Glu Gly Glu Asp	Asp Pro Ala	Gly Glu	
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Ala Gln Ala	Gly Arg Leu Pro	Leu Leu Pro Cys	Ala Arg Ala	Tyr Val	
65		70		75	80
Ser Pro Arg	Ala Pro Phe	Tyr Arg Pro	Leu Ala Pro	Glu Leu Arg	Ala
	85		90		95
Arg Gln Leu	Glu Leu Gly Ala	Glu His Ala	Leu Leu Leu	Asp Ala Ala	
100		105		110	
Gly Gln Val	Phe Ser Trp Gly	Gly Gly Arg His	Gly Gln Leu	Gly His	
115		120		125	
Gly Thr Leu	Glu Ala Glu Leu	Glu Pro Arg Leu	Leu Leu Glu	Ala Leu Gln	
130		135		140	
Gly Leu Val	Met Ala Glu Val	Ala Ala Gly Gly	Trp His Ser	Val Cys	
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Val Ser Glu	Thr Gly Asp Ile	Tyr Ile Trp Gly	Trp Asn Glu	Ser Gly	
	165		170		175
Gln Leu Ala	Leu Pro Thr Arg	Asn Leu Ala	Glu Asp Gly	Glu Thr Val	
	180		185		190
Ala Arg Glu	Ala Thr Glu Leu	Asn Glu Asp	Gly Ser Gln	Val Lys Arg	
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Thr Gly Gly	Ala Glu Asp Gly	Ala Pro Ala	Pro Phe Ile	Ala Val Gln	
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Pro Phe Pro	Ala Leu Leu Asp	Leu Pro Met	Gly Ser Asp	Ala Val Lys	
225		230		235	240
Ala Ser Cys	Gly Ser Arg His	Thr Ala Val	Val Thr Arg	Thr Gly Glu	
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Leu Tyr Thr	Trp Gly Trp Gly	Lys Tyr Gly	Gln Leu Gly	His Glu Asp	
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Thr Thr Ser	Leu Asp Arg Pro	Arg Arg Val	Glu Tyr Phe	Val Asp Lys	
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<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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<210> 6042
 <211> 97
 <212> PRT
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 Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
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 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
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 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
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<400> 6044

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Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
      35             40             45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
      50             55             60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
65             70             75             80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
      85             90             95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
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Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
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<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

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 1860
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 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

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Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
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Leu Lys Val His Pro Glu Gln Glu Lys Leu Met Thr Val Arg Thr Ile
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Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly
      115        120        125
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu
      130        135        140
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg
145          150          155          160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His
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Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln
      180        185        190
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg
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Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala
210          215          220
Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val
225          230          235          240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg
      245        250        255
Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro
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Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala
      275        280        285
Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln
290          295          300
Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu
305          310          315          320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val
      325        330        335
Ser Lys Met Ser Val Ser Arg Ser Ser Ser Leu Lys Ser Ser Ser Ser
      340        345        350
Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser
      355        360        365
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly
370          375          380
Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn
385          390          395          400
Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg Ser Arg Leu Asn His
      405        410        415
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu
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Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg
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Asp Val Ala Leu Tyr Pro Ser Tyr Gln
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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

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 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
 50 55 60
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
 65 70 75 80
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
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<210> 6049
 <211> 479
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 <213> Homo sapiens

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<210> 6050
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<400> 6050
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 35 40 45
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr
 50 55 60
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
 65 70 75 80
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
 85 90 95
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
 100 105 110
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
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<210> 6051
 <211> 2404
 <212> DNA
 <213> Homo sapiens

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<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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			20					25					30		
Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
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Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
		50				55				60					
Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
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Arg	Tyr	Gln	Glu	Val	Cys	Arg	Gln	Arg	Ser	Lys	Arg	Thr	Gln	Leu	Glu
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Glu	Ile	Gln	Gln	Lys	Val	Met	Gln	Val	Val	Asn	Trp	Leu	Glu	Gly	Pro
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Gly	Ser	Glu	Gln	Leu	Arg	Ala	Gln	Trp	Gly	Ile	Gly	Asp	Ser	Ile	Arg
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Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu		175
	180	185
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala		190
	195	200
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val		205
	210	215
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu		220
225	230	235
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg		240
	245	250
Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa		255
	260	265
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp		270
	275	280
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys		285
290	295	300
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln		305
	310	315
Leu Phe Lys Cys Glu Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser		320
	325	330
Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp		335
	340	345
Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp		350
	355	360
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr		365
370	375	380
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp		385
	390	395
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser		400
	405	410
Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn		415
	420	425
Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn		430
	435	440
Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu		445
	450	455
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr		460
465	470	475
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp		480
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<210> 6053

<211> 3257

<212> DNA

<213> Homo sapiens

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3257

<210> 6054

<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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Gln	Leu	Ser	Pro	Ala	Ile	Pro	Val	Phe	Ala	Ala	Met	Leu	Phe	Leu	Phe
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Ser	Met	Ala	Thr	Leu	Leu	Arg	Thr	Ser	Phe	Ser	Asp	Pro	Gly	Val	Ile
			100					105					110		
Pro	Arg	Ala	Leu	Pro	Asp	Glu	Ala	Ala	Phe	Ile	Glu	Met	Glu	Ile	Glu
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Leu	Ser	Leu	Leu	Thr	Ile	Tyr	Val	Phe	Ala	Phe	Asn	Ile	Val	Tyr	Val
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Ser	Ser	Leu	Leu	Pro	Gln	Ser	Pro	Ala	Pro	Thr	Glu	His	Leu	Asn	Ser

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 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6056

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Gly Thr Ile Ile Ser Val Asp Ser Ala Gly Lys Val Gln Phe Trp Asp
225          230          235          240
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          245          250          255
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<210> 6057

<211> 3924

<212> DNA

<213> Homo sapiens

<400> 6057

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 6058

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Leu Ala Ala Gly Val Trp Gly Leu His Ala Gln Thr His Thr Tyr Pro
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Thr Lys Lys Ile Ser Gln Ala Pro Leu Leu Glu Tyr Pro Pro Asn Pro
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Lys Ser Arg Ala Pro Arg Met Leu Val Ile Lys Lys Gly Asn Thr Lys
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Asp Leu Gln Leu Ser Gly Phe Pro Val Val Gly Asn Leu Pro Ser Gln
 210          215          220
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 225          230          235          240
Lys Pro Ala Ala Pro Pro Thr Lys Pro Thr Gln Trp Lys Ser Gln Thr
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<210> 6059

<211> 1442

<212> DNA

<213> Homo sapiens

<400> 6059

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<211> 1582

<212> DNA

<213> Homo sapiens

<400> 6061

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<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
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<210> 6065

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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		20						25					30		
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40				45				
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50				55					60					
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<212> PRT

<213> Homo sapiens

<400> 6068

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35     40     45
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50     55     60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65     70     75     80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
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<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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<212> PRT

<213> Homo sapiens

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		115					120					125			
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<212> DNA

<213> Homo sapiens

<400> 6071

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<210> 6072

<211> 76

<212> PRT

<213> Homo sapiens

<400> 6072

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			20					25					30		
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<211> 387

<212> DNA

<213> Homo sapiens

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<211> 69

<212> PRT

<213> Homo sapiens

<400> 6074

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<210> 6075

<211> 4668

<212> DNA

<213> Homo sapiens

<400> 6075

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<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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			20					25					30		
Glu	Val	Gly	Leu	Ala	Leu	Lys	Asp	Leu	Ala	Lys	Gln	Tyr	Ser	Asp	Arg
			35				40					45			
Leu	Glu	Cys	Cys	Glu	Asn	Glu	Val	Glu	Lys	Val	Ile	Glu	Glu	Ile	Arg
			50				55					60			
Cys	Lys	Ala	Ile	Glu	Arg	Gly	Thr	Gly	Asn	Asp	Asn	Tyr	Arg	Thr	Thr
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Gly	Ile	Ala	Thr	Ile	Glu	Val	Phe	Leu	Pro	Pro	Arg	Leu	Lys	Lys	Asp
			85						90					95	
Arg	Lys	Asn	Leu	Leu	Glu	Thr	Arg	Leu	His	Ile	Thr	Gly	Arg	Glu	Leu
			100					105					110		
Arg	Ser	Lys	Ile	Ala	Glu	Thr	Phe	Gly	Leu	Gln	Glu	Asn	Tyr	Ile	Lys
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Ser	Glu	Glu	Asp	Ala	Arg	Lys	Asn	Phe	Gln	Leu	Glu	Glu	Glu	Glu	Gln

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			180					185					190		
Leu	Glu	Ile	Leu	Ala	Lys	Arg	Ala	Ala	Glu	Thr	Val	Val	Asp	Pro	Glu
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Ile	Pro	Pro	Ser	Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His
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Glu	Lys	Gly	Arg	Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu
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Pro	Cys	Leu	Leu	Asp	Ala	Asp	Lys	Tyr	Phe	Cys	Glu	Cys	Cys	Arg	Glu
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Leu	Leu	Asp	Thr	Val	Asp	Asn	Tyr	Ala	Val	Leu	Gln	Leu	Asp	Ile	Val
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				325				330						335	
Val	Leu	Phe	Leu	Arg	Leu	Tyr	Leu	Leu	Gln	Gly	Ile	Arg	Asn	Tyr	His
			340				345					350			
Ser	Gly	Asn	Asp	Val	Glu	Ala	Tyr	Glu	Tyr	Leu	Asn	Arg	His	Val	Ser
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Ser	Leu	Lys	Ser	Tyr	Ile	Leu	Ile	His	Gln	Lys	Trp	Thr	Ile	Cys	Cys
					375					380					
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Asp	Gly	Asn	Val	Asp	His	Ala	Ala	Thr	His	Ile	Thr	Asn	Arg	Arg	Glu
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Leu	Glu	Asn	Ile	Arg	Phe	Leu	Lys	Gly	Met	Gly	Tyr	Ser	Thr	His	Ala
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			450			455				460					
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<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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 <211> 651
 <212> DNA
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<210> 6080
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 6080
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 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65 70 75 80
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
 85 90 95
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

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      100      105      110
Met Lys Ser Val Leu Trp Trp Leu Pro Val Glu Lys Ala Phe Trp Arg
      115      120      125
Gln Pro Ala Gly Pro Gly Ser Gly Ile Arg Glu Arg Leu Glu His Pro
      130      135      140
Val Leu His Val Ser Trp Asn Asp Ala Arg Ala Tyr Cys Ala Trp Arg
145      150      155      160
Gly Lys

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<210> 6081
 <211> 655
 <212> DNA
 <213> Homo sapiens

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<400> 6081
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120
ggaccagctg ttataacatt gttactagat gaatgtccat tgcccactaa agatgcactc
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cagaaattga ctgaaattct caattttaa atggagaagtag cttgccagga ctcaagccat
240
cctgccaaac acaggaacac atctgcagtc ctaggctgct tggccgagaa actagcaggt
300
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420
acaagtgaaa ataaattgac tatttctgaa tccagtatta gtgaccggct tgtcacattg
480
gagtcctggg ctaatgatcc tgattatctg aaacgtcaag ttggtttctg tgcccagtgg
540
agcttagaca atctcttttt aaaagaaggt agacagctga cctatgagaa agtgaacttg
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655

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<210> 6082
 <211> 218
 <212> PRT
 <213> Homo sapiens

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<400> 6082
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Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser Leu Ile Arg
20      25      30
Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr Leu Leu
35      40      45
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr
50      55      60
Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

```

```

65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
          145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
          195          200          205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083

<211> 358

<212> DNA

<213> Homo sapiens

<400> 6083

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120
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180
gtagaagaaa caaagctttt aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
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358

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<210> 6084

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6084

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20     25     30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35     40     45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50     55     60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85						90					95	
Lys	Asp	Asp	Leu	Gln											
			100												

<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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120
ggttacgaaa cagtgggttg ccctgggtgat gttctttaca tcccaatgta ctggtggcat
180
cacatagagt cattactaaa tgggggggatt accatcactg tgaacttctg gtataagggg
240
gctcccaccc ctaagagaat tgaatatcct ctcaaagctc atcagaaagt ggccataatg
300
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360
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420
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480
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660
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780
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1080
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1260

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<210> 6086

<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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			20				25					30			
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55				60						
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65				70					75					80	
Asp	Ser	Thr	Val												

<210> 6087

<211> 1506

<212> DNA

<213> Homo sapiens

<400> 6087

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1380

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<210> 6088
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 6088
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 Pro Gly Asp Leu Leu Ser Ala Arg Leu Leu Ser Gln Glu Lys Arg Ala
 35 40 45
 Ala Glu Thr His Phe Gly Phe Glu Thr Val Ser Glu Glu Glu Lys Gly
 50 55 60
 Gly Lys Val Tyr Gln Val Phe Glu Ser Val Ala Lys Lys Tyr Asp Val
 65 70 75 80
 Met Asn Asp Met Met Ser Leu Gly Ile His Arg Val Trp Lys Asp Leu
 85 90 95
 Leu Leu Trp Lys Met His Pro Leu Pro Gly Thr Gln Leu Leu Asp Met
 100 105 110
 Ala Gly Gly Thr Gly Asp Ile Ala Phe Arg Phe Leu Asn Tyr Val Gln
 115 120 125
 Ser Gln His Gln Arg Lys Gln Lys Arg Gln Leu Arg Ala Gln Gln Asn
 130 135 140
 Leu Ser Trp Glu Glu Ile Ala Lys Glu Tyr Gln Asn Glu Glu Asp Ser
 145 150 155 160
 Leu Gly Gly Ser Arg Val Val Val Cys Asp Ile Asn Lys Glu Met Leu
 165 170 175
 Lys Val Gly Lys Gln Lys Ala Leu Ala Gln Gly Tyr Arg Ala Gly Leu
 180 185 190
 Ala Trp Val Leu Gly Asp Ala Glu Glu Leu Pro Phe Asp Asp Asp Lys
 195 200 205
 Phe Asp Ile Tyr Thr Ile Ala Phe Gly Ile Arg Asn Val Thr His Ile
 210 215 220
 Asp Gln Ala Leu Gln Glu Ala His Arg Val Leu Lys Pro Gly Gly Arg
 225 230 235 240
 Phe Leu Cys Leu Glu Phe Ser Gln Val Asn Asn Pro Leu Ile Ser Arg
 245 250 255
 Leu Tyr Asp Leu Tyr Ser Phe Gln Val Ile Pro Val Leu Gly Glu Val
 260 265 270
 Ile Ala Gly Asp Trp Lys Ser Tyr Gln Tyr Leu Val Glu Ser Ile Arg
 275 280 285
 Arg Phe Pro Ser Gln Glu Glu Phe Lys Asp Met Ile Glu Asp Ala Gly
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325

<210> 6089

<211> 4211

<212> DNA

<213> Homo sapiens

<400> 6089

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1380

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<210> 6090

<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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Glu	Thr	Ser	Gln	Glu	Gln	Glu	Asp	Leu	Phe	Ile	Val	Lys	Val	Glu	Glu
			20					25					30		
Glu	Asp	Cys	Thr	Trp	Met	Gln	Glu	Tyr	Asn	Pro	Pro	Thr	Phe	Glu	Thr

35				40				45								
Phe	Tyr	Gln	Arg	Phe	Arg	His	Phe	Gln	Tyr	His	Glu	Ala	Ser	Gly	Pro	
50				55				60								
Arg	Glu	Ala	Leu	Ser	Gln	Leu	Arg	Val	Leu	Cys	Cys	Glu	Trp	Leu	Arg	
65					70					75					80	
Pro	Glu	Leu	His	Thr	Lys	Glu	Gln	Ile	Leu	Glu	Leu	Leu	Val	Leu	Glu	
				85					90					95		
Gln	Phe	Leu	Thr	Ile	Leu	Pro	Glu	Glu	Phe	Gln	Pro	Trp	Val	Arg	Glu	
				100					105					110		
His	His	Pro	Glu	Ser	Gly	Glu	Glu	Ala	Val	Ala	Val	Ile	Glu	Asn	Ile	
				115					120					125		
Gln	Arg	Glu	Leu	Glu	Glu	Arg	Arg	Gln	Gln	Ile	Val	Ala	Cys	Pro	Asp	
				130					135					140		
Val	Leu	Pro	Arg	Lys	Met	Ala	Thr	Pro	Gly	Ala	Val	Gln	Glu	Ser	Cys	
145					150					155					160	
Ser	Pro	His	Pro	Leu	Thr	Val	Asp	Thr	Gln	Pro	Glu	Gln	Ala	Pro	Gln	
				165					170					175		
Lys	Pro	Arg	Leu	Leu	Glu	Glu	Asn	Ala	Leu	Pro	Val	Leu	Gln	Val	Pro	
				180					185					190		
Ser	Leu	Pro	Leu	Lys	Asp	Ser	Gln	Glu	Leu	Thr	Ala	Ser	Leu	Leu	Ser	
				195					200					205		
Thr	Gly	Ser	Gln	Lys	Leu	Val	Lys	Ile	Glu	Glu	Val	Ala	Asp	Val	Ala	
				210					215					220		
Val	Ser	Phe	Ile	Leu	Glu	Glu	Trp	Gly	His	Leu	Asp	Gln	Ser	Gln	Lys	
225					230					235					240	
Ser	Leu	Tyr	Arg	Asp	Asp	Arg	Lys	Glu	Asn	Tyr	Gly	Ser	Ile	Thr	Ser	
				245					250					255		
Met	Gly	Tyr	Glu	Ser	Arg	Asp	Asn	Met	Glu	Leu	Ile	Val	Lys	Gln	Ile	
				260					265					270		
Ser	Asp	Asp	Ser	Glu	Ser	His	Trp	Val	Ala	Pro	Glu	His	Thr	Glu	Arg	
				275					280					285		
Ser	Val	Pro	Gln	Asp	Pro	Asp	Phe	Ala	Glu	Val	Ser	Asp	Leu	Lys	Gly	
				290					295					300		
Met	Val	Gln	Arg	Trp	Gln	Val	Asn	Pro	Thr	Val	Gly	Lys	Ser	Arg	Gln	
305					310					315					320	
Asn	Pro	Ser	Gln	Lys	Arg	Asp	Leu	Asp	Ala	Ile	Thr	Asp	Ile	Ser	Pro	
				325					330					335		
Lys	Gln	Ser	Thr	His	Gly	Glu	Arg	Gly	His	Arg	Cys	Ser	Asp	Cys	Gly	
				340					345					350		
Lys	Phe	Phe	Leu	Gln	Ala	Ser	Asn	Phe	Ile	Gln	His	Arg	Arg	Ile	His	
				355					360					365		
Thr	Gly	Glu	Lys	Pro	Phe	Lys	Cys	Gly	Glu	Cys	Gly	Lys	Ser	Tyr	Asn	
				370					375					380		
Gln	Arg	Val	His	Leu	Thr	Gln	His	Gln	Arg	Val	His	Thr	Gly	Glu	Lys	
385					390					395					400	
Pro	Tyr	Lys	Cys	Gln	Val	Cys	Gly	Lys	Ala	Phe	Arg	Val	Ser	Ser	His	
				405					410					415		
Leu	Val	Gln	His	His	Ser	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Gly	Cys	
				420					425					430		
Asn	Glu	Cys	Gly	Lys	Asn	Phe	Gly	Arg	His	Ser	His	Leu	Ile	Glu	His	
				435					440					445		
Leu	Lys	Arg	His	Phe	Arg	Glu	Lys	Ser	Gln	Arg	Cys					

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465          470          475          480
Glu Ala Asp Met Glu Leu Ser Gly Lys Thr Gln Arg Asn Val Ser Gln
          485          490          495
Val Gln Asp Phe Gly Glu Gly Cys Glu Phe Gln Gly Lys Leu Asp Arg
          500          505          510
Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
          515          520          525
Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
          530          535          540
Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln
545          550          555          560
Ser Ala His Leu Ile Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
          565          570          575
Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu
          580          585          590
Thr Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Thr Cys Pro
          595          600          605
Leu Cys Gly Lys Ala Phe Arg Val Arg Ser His Leu Val Gln His Gln
          610          615          620
Ser Val His Ser Gly Glu Arg Pro Phe Lys Cys Asn Glu Cys Gly Lys
625          630          635          640
Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser
          645          650          655
Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln
          660          665          670
Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn
          675          680          685
Glu Lys Asn Gly Ile Cys Glu Glu Ala Tyr Ser Trp Asn Leu Thr Val
          690          695          700
Ile Glu Asp Lys Lys Ile Glu Leu Gln Glu Gln Pro Tyr Gln Cys Asp
705          710          715          720
Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr
          725          730          735
Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
          740          745          750
Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
          755          760          765
Ser Thr Lys Ser His Gln Cys His Glu Cys Gly Arg Gly Phe Thr Leu
          770          775          780
Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
785          790          795          800
Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
          805          810          815
Phe Lys His Leu Arg Ser His Glu Arg Thr Asp Pro Ile Asn Thr Leu
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Ser Val Glu Gly Ser Leu Leu
          835

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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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120
gtcctccgaa cgcggtgcca agggagacgc tgcataaaac gggctctgca cggctcccgg
180
ccccacccc cccccccaga gaaatagaag cagaggcatt atcttttttt tctacaaaaa
240
agtaggaaaa gtagaaaaag tacaaagaag caacttctcg gctgtgttta agtttacaaa
300
gtttaaaggc acaagtttcc gtgaagtagg cgctattgta tgctctatgc tcagcacaca
360
ggggaagcag tgcaggtgaa tcaggtatga ctctctaga actgaggccc taacgacgtt
420
tagtgagaaa gggttagttt cacagcttgg taggtggcac tggcgctgc gagccaagat
480
cacttctgaa gccaccactt tccaggaatt cctgtgtcct gtgtcctacc acatggcaca
540
gtcatgggca aggaccagg aattcctgtg tcctatgtgt cctaccacgt ggcacagtgc
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780
ggcggcctcc cataagccga gcaacgagca acgtgatgcc ggccaacagc tgcaactcca
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960
agctttcaga agaaacacat ttaagcttca aaaataaaaa ttatcaaaaa cataaaaaata
1020
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1080
cacctcagat ctgacaggca ggtcccggag atgctcgagt agactcatcc cagtctcggg
1140
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<210> 6092

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

Met Ala Gln Ser Trp Ala Arg Thr Gln Glu Phe Leu Cys Pro Met Cys

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      20      25      30
Thr Pro Asn Trp Tyr Trp Val Leu Gly His Pro Asn Leu Ile Arg Asp
      35      40      45
Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser
      50      55      60
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly
65      70      75      80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
      85      90      95
Gly Gln Gln Leu Gln Leu His Leu Leu Pro Ala Leu Lys Gly Ser Phe
      100      105      110
Pro Ala Ser Val Leu Ser
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<210> 6093

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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120
caagcaogga atgccacctt cctcaagcac gcaagctagg caggccctgc acgttctcac
180
tcctctccca gaagccagct tcctgcctag ggcccagcct gctaaaggat ggaaattaat
240
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300
agtggctggg cctcaacctg tgacctacat gcagggtctc tgcaccacac gactctgccc
360
tcagtccagc tgctgcagtt agctacttga cacaggaggg aactgaggct ccaattcctg
420
gcagtagggt gcttggtctaa agccccagcc agccatggct gctggtgggg gaaggctgtt
480
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600
ctgatggggg ctcccgaacc agtgcattgc tgctcacctc tgctccggcc ccacgcagcc
660
cagagaagac atctgccctt cctgatcctt gactactacc tcaagaacaa agtgacagta
720
caataacgat aacgaaggca ttgacctgtg cagcaggcct cagtgggggtt ggggaacaga
780
gcagaaaggc cagggcatgt tgctgtgacc ccccccttcc tctctttcag taaacaaaag
840
tgcacatgca gaaatctggg caggtcctat cggaagctgc tctcacccca gaggccccag
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960

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 1260
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 1320
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 1380
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 1440
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 1500
 aaaaaggaaa cagggccaaa gagagagagg ccacacagct aatgtcctcc tcacaaagag
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 1680
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 1860
 gaacgaccac acaaacacat aggtcccagc gtgtgtgctc ccagccccag cccagccca
 1920
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 1980
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 1998

<210> 6094

<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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Pro	Gln	Met	Gly	Ile	Tyr	Leu	Asp	Leu	Cys	Gly	Ser	Phe	Ser	Ala	Glu
			20					25				30			
Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
			35				40					45			
Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
			50			55				60					
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65				70				75					80		
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

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Pro Asp Ser Arg Gly Thr Ser Ser Leu His Arg Ala Ala Ala Gly
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Leu Arg Ala Glu Pro Val Gly Ala Glu Ala Leu Ala Pro Glu Val Gln
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Pro Leu Ser Leu Gly Pro Leu Gly
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<210> 6095
 <211> 441
 <212> DNA
 <213> Homo sapiens

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<400> 6095
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120
ttctccctca agaagtggaa cgcggtggcc atgtggagct gggacgtgga gtgcgatacg
180
tgcgccatct gcaggggtcca ggtgatggtg gtctggggag aatgtaatca ttccttccac
240
aactgctgta tgtccctgtg ggtgaaacag aacaatcgct gccctctctg ccagcaggac
300
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441

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<210> 6096
 <211> 97
 <212> PRT
 <213> Homo sapiens

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<400> 6096
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      20      25      30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
      35      40      45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
      50      55      60
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
65      70      75      80
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
      85      90      95
Lys

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<210> 6097
 <211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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120
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240
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360
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420
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720
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 1980
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 2280
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 gctt
 2404

<210> 6098

<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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Leu	Phe	Arg	Gly	Leu	Gln	Asn	His	Pro	Met	Val	Leu	Pro	Ile	Cys	Ser
		20					25						30		
Arg	Ser	Gly	Asp	Val	Ile	Glu	Tyr	Leu	Leu	Lys	Asn	Gln	Trp	Phe	Val
	35					40						45			
Arg	Cys	Gln	Glu	Met	Gly	Ala	Arg	Ala	Ala	Lys	Ala	Val	Glu	Ser	Gly
	50				55						60				
Ala	Leu	Glu	Leu	Ser	Pro	Ser	Phe	His	Gln	Lys	Asn	Trp	Gln	His	Trp
65				70					75					80	
Phe	Ser	His	Ile	Gly	Asp	Trp	Cys	Val	Ser	Arg	Gln	Leu	Trp	Trp	Gly
			85					90						95	
His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
		100					105					110			
Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

5280

545		550		555		560
Gln Ile Gln Leu Pro Leu Leu Ala Ala Arg Arg Tyr Lys Leu Gln Lys						
	565		570		575	
Gln Leu Asp Ser Leu Thr Ala Arg Thr Pro Ser Glu Gly Glu Ala Gly						
	580		585		590	
Thr Gln Arg Gln Gln Lys Leu Ser Ser Leu Gln Leu Glu Leu Ser Lys						
	595		600		605	
Leu Asp Lys Ala Ala Ser His Leu Arg Gln Leu Met Asp Glu Pro Pro						
	610		615		620	
Ala Pro Gly Ser Pro Glu Leu						
625		630				

<210> 6099

<211> 3957

<212> DNA

<213> Homo sapiens

<400> 6099

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120
ccagccccgg cctcccgcg acccatgccc gcccgatatg gctactacga gatcgaccgc
180
accatcgcca agggcaactt cgcggtggtc aagcgggcca cgcacctgt caccaaggcc
240
aaggttgcta tcaagatcat agataagacc cagctggatg aagaaaactt gaagaagatt
300
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360
gttatggaga cagaacggat gatttatctg gtgacagaat atgctagtgg aggggaaata
420
tttgaccacc tggtaggcca tggtagaatg gcagaaaagg aggcacgtcg gaagttcaaa
480
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<210> 6100

<211> 1102

<212> PRT

<213> Homo sapiens

<400> 6100

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 Pro Ala Ala Gly Gln Pro Arg Pro Pro Ala Pro Ala Ser Arg Gly Pro

5284

465 470 475 480
 Leu Leu Asn Gly Met Gly Pro Leu Gly Arg Arg Ala Ser Asp Gly Gly
 485 490 495
 Ala Asn Ile Gln Leu His Ala Gln Gln Leu Leu Lys Arg Pro Arg Gly
 500 505 510
 Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro
 515 520 525
 Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln
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 Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg
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 Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala
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 Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln
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 Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile
 595 600 605
 Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln
 610 615 620
 Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile
 630 635 640
 Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln
 645 650 655
 Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser
 660 665 670
 Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser
 675 680 685
 Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala
 690 695 700
 Ala Ser Ser Ser Gln Phe Gln Gly Leu Pro Ser Arg Ser Ala Ile Phe
 705 710 715 720
 Gln Gln Gln Pro Glu Asn Cys Ser Ser Pro Pro Asn Val Ala Leu Thr
 725 730 735
 Cys Leu Gly Met Gln Gln Pro Ala Gln Ser Gln Gln Val Thr Ile Gln
 740 745 750
 Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala
 755 760 765
 Gly Ser Ser Gly Arg Gly Ile Ser Ile Ser Pro Ser Ala Gly Gln Met
 770 775 780
 Gln Met Gln His Arg Thr Asn Leu Met Ala Thr Leu Ser Tyr Gly His
 785 790 795 800
 Arg Pro Leu Ser Lys Gln Leu Ser Ala Asp Ser Ala Glu Ala His Ser
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 Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu
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 His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr
 835 840 845
 Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val
 850 855 860
 Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln
 865 870 875 880
 Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro
 885 890 895
 Thr Pro Pro Asp Tyr Thr Arg His Gln Gln Val Pro His Ile Leu Gln

900 905 910
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 915 920 925
 Leu Pro Pro Thr Glu Phe Ala Gln Leu Ile Lys Arg Gln Gln Gln Gln
 930 935 940
 Arg Gln Gln Gln Gln Gln Gln Gln Gln Glu Tyr Gln Glu Leu
 945 950 955 960
 Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu
 965 970 975
 Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala
 980 985 990
 Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln
 995 1000 1005
 Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser
 1010 1015 1020
 Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly
 1025 1030 1035 1040
 Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu
 1045 1050 1055
 Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn
 1060 1065 1070
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<210> 6101

<211> 1447

<212> DNA

<213> Homo sapiens

<400> 6101

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 180
 gtttactaca gggatcccca aatattgtta gttgaatgaa caaacacaca tttcaaggag
 240
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 300
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 420
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 480
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<210> 6102

<211> 123

<212> PRT

<213> Homo sapiens

<400> 6102

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Val	Ala	Tyr	Arg	Ser	Ser	His	Gly	Asp	Leu	Arg	Pro	Arg	Ala	Ser	Ala
			20					25					30		
Leu	Ala	Met	Val	Ser	Gly	Asp	Gly	Phe	Leu	Val	Ser	Arg	Pro	Glu	Ala
		35				40					45				
Ile	His	Leu	Gly	Pro	Arg	Gln	Ala	Val	Arg	Pro	Ser	Val	Arg	Ala	Glu
	50				55					60					
Ser	Arg	Arg	Val	Asp	Gly	Gly	Gly	Arg	Ser	Pro	Arg	Glu	Pro	Asp	Gly
65				70					75					80	
Arg	Gly	Arg	Ser	Arg	Gln	Ala	Arg	Phe	Ser	Pro	Tyr	Pro	Ile	Pro	Ala
			85					90					95		
Val	Glu	Pro	Asp	Leu	Leu	Arg	Ser	Val	Leu	Gln	Gln	Arg	Leu	Ile	Ala
			100					105					110		
Leu	Gly	Gly	Val	Ile	Ala	Ala	Arg	Ile	Ser	Val					
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<210> 6103

<211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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20          25          30
Leu Asn Arg Leu Gln Tyr Ala Val Ile Ser Glu Ala Trp Arg Leu Val
35          40          45
Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
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Gly Leu Gly Met Arg Tyr Ala
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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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420

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 1846

<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
          35          40          45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
          50          55          60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
          65          70          75          80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
          85          90          95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
          100          105          110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
          115          120          125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
          130          135          140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
          145          150          155          160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
          165          170          175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
          180          185          190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
          195          200          205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
          210          215          220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
          225          230          235          240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
          245          250          255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
          260          265          270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
          275          280          285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
          290          295          300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
          305          310          315          320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
          325          330          335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
          340          345          350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
          355          360          365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
          370          375          380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
          385          390          395          400
Arg Ser Pro Ser His
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<210> 6107
 <211> 896
 <212> DNA
 <213> Homo sapiens

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 180
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 420
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 720
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 780
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<210> 6108
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6108
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 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

			85					90				95			
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
			100					105					110		
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
			115					120							

<210> 6109

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 6109

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1260

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<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

Met	Gly	Pro	Trp	Gly	Glu	Pro	Glu	Leu	Leu	Val	Trp	Arg	Pro	Glu	Gly
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Ser	Phe	Arg	Ala	Ser	Ser	Ala	Cys	Gly	Ala	Gly	Gly	Glu	Val	Gly	Gly
			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35					40					45		
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
		50				55					60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70					75					80
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85						90					95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130				135					140			
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

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145          150          155          160
Gly Pro Gly Val Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala
          165          170          175
Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe
          180          185          190
Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu
          195          200          205
Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu
          210          215          220
Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly
225          230          235          240
Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly
          245          250          255
Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser
          260          265          270
Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu
          275          280          285
Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys
          290          295          300
Val Ile Leu Leu Leu Ala Gly Phe Ala Leu Leu Thr Gly Leu Leu Phe
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Ile Gln Ile

```

<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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120
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300
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420
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720

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<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

Met	Ser	Leu	Phe	Cys	Phe	Val	Leu	Phe	Leu	Arg	Trp	Ser	Phe	Pro	Leu
1				5					10					15	
Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
		20					25						30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35				40					45				
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55					60				
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65				70					75					80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
			85					90					95		
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 6113

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1080

aggcagaagg aacta

1095

<210> 6114

<211> 87

<212> PRT

<213> Homo sapiens

<400> 6114

Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

```

      1             5             10             15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20             25             30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35             40             45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50             55             60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65             70             75             80
Leu Asp Arg Gln Lys Glu Leu
      85

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<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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120
actgtggcgt cccagggcgg tggagggagc aacttcgggg gcacgtcctc gtaaattccc
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411

```

<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

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Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
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Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20             25             30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35             40             45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50             55             60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65             70             75             80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85             90             95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100            105            110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

```

115 120 125

Arg

<210> 6117
 <211> 962
 <212> DNA
 <213> Homo sapiens

<400> 6117
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 360
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 420
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 660
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 780
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 840
 aatacgtatt tttggcaggg agagggaacg gtccatgaaa tctttatgtg atataaggat
 900
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 960
 aa
 962

<210> 6118
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 6118
 Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His
 1 5 10 15
 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

```

          20          25          30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
          35          40          45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
          50          55          60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
65          70          75          80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
          85          90          95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
          100          105          110
Lys

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<210> 6119
 <211> 375
 <212> DNA
 <213> Homo sapiens

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<400> 6119
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120
tggccccaca gaactcatgc ctgcttgctt taaacccacc aatgaaaact ccccatggga
180
aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtctctgtgc
240
tctgcctctc tcttgccctt acccactggg tgagcatgtg tgtcccaaac ggccctgcaa
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tgtgtcatgt tgtgc
375

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<210> 6120
 <211> 118
 <212> PRT
 <213> Homo sapiens

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<400> 6120
Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
1          5          10          15
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
20          25          30
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
35          40          45
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
50          55          60
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
65          70          75          80
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
85          90          95
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

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100
Cys Asp Val Ser Cys Cys
115

105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

<400> 6121
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120
aagaaacact ctccctctgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt
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300
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg
360
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc
420
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga
480
tagatggaag tgcagggtggc atctctaact gtacacaaaag aattttggag cagagggaaa
540
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600
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720
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1039

<210> 6122
<211> 221
<212> PRT
<213> Homo sapiens

<400> 6122
Met Asn Glu Glu Glu Gln Phe Val Asn Ile Asp Leu Asn Asp Asp Asn

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Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe
20           25           30
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp
35           40           45
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys
50           55           60
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys
65           70           75           80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp
85           90           95
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys
100          105          110
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu
115          120          125
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala
130          135          140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg
145          150          155          160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln
165          170          175
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser
180          185          190
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala
195          200          205
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu
210          215          220

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<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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120
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600

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<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
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Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
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Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
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Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
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Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
				165					170					175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
		180						185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
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225					230					235					240
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		260						265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
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<210> 6125
 <211> 468
 <212> DNA
 <213> Homo sapiens

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 <211> 156
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 50 55 60
 Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys
 65 70 75 80
 Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu
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 100 105 110
 Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu
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<210> 6127
 <211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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			20					25					30		
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35					40					45			
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
	50					55					60				
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70						75				80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85						90					95	
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
			100					105					110		
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
		115				120						125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
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Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
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			165						170					175	
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
			180					185					190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
	195					200						205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
	210					215					220				
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
225					230					235				240	
Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245					250					255		
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

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 275 280 285
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 Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His
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 Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu
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 Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
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 Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
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 Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
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 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
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 Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
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 Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
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 Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
 465 470 475 480
 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
 485 490 495
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
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<210> 6129

<211> 2012

<212> DNA

<213> Homo sapiens

<400> 6129

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2012

<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Gly Pro Arg Leu Phe Leu Leu Gln Gln Pro Leu Ala Pro Ser Gly Leu
          35          40          45
Thr Leu Lys Ser Glu Ala Leu Arg Asn Trp Gln Val Tyr Arg Leu Val
          50          55          60
Thr Tyr Ile Phe Val Tyr Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala
          65          70          75          80
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr
          85          90          95
Val Arg His Cys Phe Phe Thr Val Ile Phe Ala Ile Phe Ser Ala Ile
          100          105          110
Ile Phe Leu Ser Phe Glu Ala Val Ser Ser Leu Ser Lys Leu Gly Glu
          115          120          125
Val Glu Asp Ala Arg Gly Phe Thr Pro Val Ala Phe Ala Met Leu Gly
          130          135          140
Val Thr Thr Val Arg Ser Arg Met Arg Arg Ala Leu Val Phe Gly Met
          145          150          155          160
Val Val Pro Ser Val Leu Val Pro Trp Leu Leu Leu Gly Ala Ser Trp
          165          170          175
Leu Ile Pro Gln Thr Ser Phe Leu Ser Asn Val Cys Gly Leu Ser Ile
          180          185          190
Gly Leu Ala Tyr Gly Leu Thr Tyr Cys Tyr Ser Ile Asp Leu Ser Glu
          195          200          205
Arg Val Ala Leu Lys Leu Asp Gln Thr Phe Pro Phe Ser Leu Met Arg
          210          215          220
Arg Ile Ser Val Phe Lys Tyr Val Ser Gly Ser Ser Ala Glu Arg Arg
          225          230          235          240
Ala Ala Gln Ser Arg Lys Leu Asn Pro Val Pro Gly Ser Tyr Pro Thr
          245          250          255
Gln Ser Cys His Pro His Leu Ser Pro Ser His Pro Val Ser Gln Thr
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Gln His Ala Ser Gly Gln Lys Leu Ala Ser Trp Pro Ser Cys Thr Pro
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355

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<211> 3526

<212> DNA

<213> Homo sapiens

<400> 6131

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<210> 6132

<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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		20					25					30			
Leu	Lys	Ile	Thr	Gln	Lys	Glu	Ser	Arg	Lys	Ser	Lys	Ser	Pro	Pro	Lys
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Val	Pro	Ile	Val	Ile	Gln	Asp	Asp	Ser	Leu	Pro	Ala	Gly	Pro	Pro	Pro
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Gln	Ile	Arg	Ile	Leu	Lys	Arg	Pro	Thr	Ser	Asn	Gly	Val	Val	Ser	Ser
65				70					75					80	
Pro	Asn	Ser	Thr	Ser	Arg	Pro	Thr	Leu	Pro	Val	Lys	Ser	Leu	Ala	Gln
			85					90					95		
Arg	Glu	Ala	Glu	Tyr	Ala	Glu	Ala	Arg	Lys	Arg	Ile	Leu	Gly	Ser	Ala
		100					105					110			
Ser	Pro	Glu	Glu	Gln	Glu	Lys	Pro	Ile	Leu	Asp	Arg	Ser	Ser	Ser	
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Asp	Leu	Leu	Pro	Phe	Arg	Pro	Thr	Arg	Ile	Ser	Gln	Pro	Glu	Asp	Ser
	130				135						140				
Arg	Gln	Pro	Asn	Asn	Val	Ile	Arg	Gln	Pro	Leu	Gly	Pro	Asp	Gly	Ser
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<210> 6133

<211> 4156

<212> DNA

<213> Homo sapiens

<400> 6133

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<210> 6134

<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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		20						25					30		
Pro	Asp	Val	Gly	Gly	Gly	Trp	Leu	Glu	Gly	Arg	Asn	Ile	Lys	Gly	Glu
		35					40					45			
Arg	Gly	Leu	Val	Pro	Thr	Asp	Tyr	Val	Glu	Ile	Leu	Pro	Ser	Asp	Gly
		50				55					60				
Lys	Asp	Gln	Phe	Ser	Cys	Gly	Asn	Ser	Val	Ala	Asp	Gln	Ala	Phe	Leu
65					70					75				80	
Asp	Ser	Leu	Ser	Ala	Ser	Thr	Ala	Gln	Ala	Ser	Ser	Ser	Ala	Ala	Ser
			85					90					95		
Asn	Asn	His	Gln	Val	Gly	Ser	Gly	Asn	Asp	Pro	Trp	Ser	Ala	Trp	Ser
			100					105					110		
Ala	Ser	Lys	Ser	Gly	Asn	Trp	Glu	Ser	Ser	Glu	Gly	Trp	Gly	Ala	Gln

115	120	125
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130	135	140
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145	150	155
Asp Asp Asp Asp Trp Asp Glu Asp Trp Asp Gly Pro Lys Ser Ser Ser		
165	170	175
Tyr Phe Lys Asp Ser Glu Ser Ala Asp Ala Gly Gly Ala Gln Arg Gly		
180	185	190
Asn Ser Arg Ala Ser Ser Ser Ser Met Lys Ile Pro Leu Asn Lys Phe		
195	200	205
Pro Gly Phe Ala Lys Pro Gly Thr Glu Gln Tyr Leu Leu Ala Lys Gln		
210	215	220
Leu Ala Lys Pro Lys Glu Lys Ile Pro Ile Ile Val Gly Asp Tyr Gly		
225	230	235
Pro Met Trp Val Tyr Pro Thr Ser Thr Phe Asp Cys Val Val Ala Asp		
245	250	255
Pro Arg Lys Gly Ser Lys Met Tyr Gly Leu Lys Ser Tyr Ile Glu Tyr		
260	265	270
Gln Leu Thr Pro Thr Asn Thr Asn Arg Ser Val Asn His Arg Tyr Lys		
275	280	285
His Phe Asp Trp Leu Tyr Glu Arg Leu Leu Val Lys Phe Gly Ser Ala		
290	295	300
Ile Pro Ile Pro Ser Leu Pro Asp Lys Gln Val Thr Gly Arg Phe Glu		
305	310	315
Glu Glu Phe Ile Lys Met Arg Met Glu Arg Leu Gln Ala Trp Met Thr		
325	330	335
Arg Met Cys Arg His Pro Val Ile Ser Glu Ser Glu Val Phe Gln Gln		
340	345	350
Phe Leu Asn Phe Arg Asp Glu Lys Glu Trp Lys Thr Gly Lys Arg Lys		
355	360	365
Ala Glu Arg Asp Glu Leu Ala Gly Val Met Ile Phe Ser Thr Met Glu		
370	375	380
Pro Glu Ala Pro Asp Leu Asp Leu Val Glu Ile Glu Gln Lys Cys Glu		
385	390	395
Ala Val Gly Lys Phe Thr Lys Ala Met Asp Asp Gly Val Lys Glu Leu		
405	410	415
Leu Thr Val Gly Gln Glu His Trp Lys Arg Cys Thr Gly Pro Leu Pro		
420	425	430
Lys Glu Tyr Gln Lys Ile Gly Lys Ala Leu Gln Ser Leu Ala Thr Val		
435	440	445
Phe Ser Ser Ser Gly Tyr Gln Gly Glu Thr Asp Leu Asn Asp Ala Ile		
450	455	460
Thr Glu Ala Gly Lys Thr Tyr Glu Glu Ile Ala Ser Leu Val Ala Glu		
465	470	475
Gln Pro Lys Lys Asp Leu His Phe Leu Met Glu Cys Asn His Glu Tyr		
485	490	495
Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
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<400> 6136
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Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His
      35              40              45
Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser
      50              55              60
Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
      65              70              75              80
Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala
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Leu Val Lys Pro Ser Ala Ser Gln Tyr
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<210> 6137
<211> 2073
<212> DNA
<213> Homo sapiens

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660
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<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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			20					25					30		
Arg	Lys	Glu	Ala	Lys	Lys	Gln	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp	Pro
		35				40					45				
Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Arg	Glu	Ala
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Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys	Leu
	65				70					75				80	
Asp	Arg	Gln	Lys	Glu	Leu	Glu	Lys	Lys	Arg	Lys	Leu	Glu	Thr	Asn	Pro
			85						90					95	
Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
			100					105					110		
Leu	Cys	Lys	Thr	Glu	Asn	Lys	Ala	Lys	Ser	Gly	Lys	Gln	Asn	Ser	Lys
		115					120					125			
Lys	Leu	Tyr	Cys	Gln	Glu	Leu	Lys	Lys	Val	Ile	Glu	Ala	Ser	Asp	Val
	130					135					140				
Val	Leu	Glu	Val	Leu	Asp	Ala	Arg	Asp	Pro	Leu	Gly	Cys	Arg	Cys	Pro
	145				150					155				160	
Gln	Val	Glu	Glu	Ala	Ile	Val	Gln	Ser	Gly	Gln	Lys	Lys	Leu	Val	Leu
			165						170				175		
Ile	Leu	Asn	Lys	Ser	Asp	Leu	Val	Pro	Lys	Glu	Asn	Leu	Glu	Ser	Trp
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Leu	Asn	Tyr	Leu	Lys	Lys	Glu	Leu	Pro	Thr	Val	Val	Phe	Arg	Ala	Ser

	195					200					205									
Thr	Lys	Pro	Lys	Asp	Lys	Gly	Lys	Ile	Thr	Lys	Arg	Val	Lys	Ala	Lys					
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Lys	Asn	Ala	Ala	Pro	Phe	Arg	Ser	Glu	Val	Cys	Phe	Gly	Lys	Glu	Gly					
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				245					250					255						
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Leu	Thr	Arg	Ser	Met	Gln	Val	Val	Pro	Leu	Asp	Lys	Gln	Ile	Thr	Ile					
	290					295					300									
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Lys	Tyr	Thr	Val	Pro	Gly	Tyr	Arg	Asn	Ser	Leu	Glu	Phe	Phe	Thr	Val					
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385					390					395					400					
Ala	Tyr	Tyr	Cys	His	Pro	Pro	Thr	Ser	Trp	Thr	Pro	Pro	Pro	Tyr	Phe					
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Leu	Glu	Lys	Asn	Asn	Ala	Gln	Ser	Ile	Arg	Ala	Ile	Lys	Gly	Pro	His					
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Leu	Ala	Asn	Ser	Ile	Leu	Phe	Gln	Ser	Ser	Gly	Leu	Thr	Asn	Gly	Ile					
	450					455				460										
Ile	Glu	Glu	Lys	Asp	Ile	His	Glu	Glu	Leu	Pro	Lys	Arg	Lys	Glu	Arg					
465					470					475					480					
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<212> PRT

<213> Homo sapiens

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780

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<210> 6144

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6144

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Ser	Thr	Glu	Ser	Leu	Thr	Leu	His	Pro	Arg	Val	Leu	Pro	Leu	Trp	Asn
			20					25					30		
Ser	Gly	Ser	Arg	Gln	Ala	Trp	Val	His	Pro	Pro	Ala	Gln	Pro	Arg	Thr
			35				40					45			
Ala	Gly	Pro	Glu	Leu	Gly	Gly	Gln	Gly	Ile	Pro	Ser	Pro	Gly	Cys	Ala
			50			55					60				
Cys	Gln	Arg	Gly	Glu	Ala	Gly	Gly	Gly	Gly	Asn	Ala	Val	Leu	Pro	Gln
65					70					75				80	
Glu	Ser	Val	Leu	Arg	Ala	Ser	Ala	Val	Gly	Arg	Gly	Ala	Glu	Gly	Pro
			85					90					95		
Gly	Ala	Leu	Thr	Arg	Ser	Gly	Ser	Gly	Ala	Ala	Ser	Ala	Leu	Val	Arg
			100					105					110		
Pro	Gly	Glu	Lys	Gly	Cys	Trp	Cys	Arg	Thr	Ala	Ser	Gly	Ala	Gly	Pro
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Ser	Gly	Asp	Arg	Gly	Pro	Glu	Val	Gln	Val	Pro	Gly	Gly			
			130				135					140			

<210> 6145

<211> 766

<212> DNA

<213> Homo sapiens

<400> 6145

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 180
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 240
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 420
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<210> 6146

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6146

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Ser	Pro	Val	Pro	Arg	Ala	Met	Ser	Ser	Gln	Gln	Gln	Gln	Arg	Gln	Ala
			20					25					30		
Ala	Val	Pro	Thr	Pro	Glu	Ala	Gln	Gln	Gln	Val	Lys	Gln	Pro	Cys	
		35					40				45				
Gln	Pro	Pro	Pro	Val	Lys	Cys	Gln	Glu	Thr	Cys	Ala	Pro	Lys	Thr	Lys
		50				55					60				
Asp	Pro	Cys	Ala	Pro	Gln	Val	Lys	Lys	Gln	Cys	Pro	Pro	Lys	Asp	Thr
65					70					75				80	
Ile	Ile	Pro	Ala	Gln	Gln	Lys	Cys	Pro	Ser	Ala	Gln	Gln	Ala	Ser	Lys
				85					90					95	
Ser	Lys	Gln	Lys												
			100												

<210> 6147

<211> 1852

<212> DNA

<213> Homo sapiens

<400> 6147

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 180
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 240
 aagcaaagtg atattcaaaa tttaaataa gagagaatct tagctttaca gctttgtggg
 300

tggataaaga aaggaacgga tgtagacgtg gggccatttt tgaactccct tgtacaagaa
360
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420
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480
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540
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600
acaggatctt acgatggagt tttgtatgaa aacaaagttg cagtacgtga cagagtggca
660
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720
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780
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1380
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1740
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1852

<210> 6148

<211> 410

<212> PRT

<213> Homo sapiens

<400> 6148

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      20           25           30
Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
      35           40           45
Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Ala Val Ala Leu
      50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
      85           90           95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Ser Leu Trp Arg Glu Met Cys Ser
      100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
      115          120          125
Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
      130          135          140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
      165          170          175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
      180          185          190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
      195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
      210          215          220
Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
225          230          235          240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
      245          250          255
Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
      260          265          270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
      275          280          285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
      290          295          300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
305          310          315          320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
      325          330          335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
      340          345          350
Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
      355          360          365
Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
      370          375          380
Pro Val Ser Ala Cys Thr Cys Lys Cys Met Gln Leu Asp Thr Thr Gly

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<210> 6149
<211> 1949
<212> DNA
<213> Homo sapiens

<400> 6149
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180
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240
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300
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420
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780
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1200
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1320

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 1920
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 1949

<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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Leu	Ser	Ser	Asp	Met	Val	Glu	Lys	Gln	Thr	Gly	Lys	Lys	Asp	Lys	Asp
			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
			35				40					45			
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
			50			55					60				
Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
65					70				75					80	
Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
				85				90						95	
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
			115				120					125			
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
			130			135					140				
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
145					150				155					160	
Leu	Asn	Lys	Arg	Asn	Glu	Arg	Gly	Glu	Thr	Arg	Leu	His	Arg	Ala	Ala
				165				170						175	
Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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<210> 6151
<211> 648
<212> DNA
<213> Homo sapiens
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120
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240
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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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Gln	Pro	Cys	Gly	Ser	Pro	Arg	Arg	Thr	Glu	Glu	Thr	Gly	Glu	Thr	Trp
			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55				60					
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65				70					75					80	
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90						95	
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
			100				105						110		
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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Arg	Arg														
	130														

<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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1810

<210> 6154
 <211> 388
 <212> PRT
 <213> Homo sapiens

<400> 6154
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 35 40 45
 Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
 50 55 60
 Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
 65 70 75 80
 Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
 85 90 95
 Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
 100 105 110
 Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
 115 120 125
 Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
 130 135 140
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 His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
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 His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
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 Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
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 Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
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 Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
 275 280 285
 Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
 290 295 300
 Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
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 Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
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<210> 6155
<211> 995
<212> DNA
<213> Homo sapiens

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<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

<400> 6156
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<211> 2135
<212> DNA
<213> Homo sapiens
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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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 <211> 4310
 <212> DNA
 <213> Homo sapiens

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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<211> 58

<212> PRT

<213> Homo sapiens

<400> 6162

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<211> 713

<212> DNA

<213> Homo sapiens

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 240
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 300
 gtacgagaag gtgcatgcgg ggatttcggc tgcccgaaaa gcaacctctt aaaacccgag
 360
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 420
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 480

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 540
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 600
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<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

Met	Trp	Val	Thr	Val	Thr	Gln	Trp	Val	Thr	Gly	Ala	Glu	Gln	Gly	Arg
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			20					25					30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
		35					40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55					60				
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65					70					75					80
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85						90					95	
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
			100					105						110	
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
			115				120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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 120
 atccagcggc tcggggacac ggaagagatg ttaagcaaga aacaggagtt cctggagaag
 180
 aaaatcgagc aggagctgac ggccgccaag aagcacggca ccaaaaacaa gcgcgcggcc
 240
 ctccaggcac tgaagcgtaa gaagaggtat gagaagcagc tggcgcagat cgacggcaca
 300
 ttatcaacca tcgagttcca gcgggaggcc ctggagaatg ccaacaccaa caccgaggtg
 360
 ctcaagaaca tgggctatgc cgccaaggcc atgaaggcg cccatgacaa catggacatc
 420
 gataaagttg atgagttaat gcaggacatt gctgaccagc aagaacttgc agaggagatt
 480

tcaacagcaa ttctgaaacc tgtagggttt ggagaagagt ttgacgagga tgagctcatg
 540
 gcggaattag aagaactaga acaggaggaa ctagacaaga atttgctgga aatcagtgga
 600
 cccgaaacag tccctctacc aaatgttccc tctatagccc taccatcaaa acccgccaag
 660
 aagaaagaag aggaggacga cgacatgaag gaattggaga actgggctgg atccatgtaa
 720
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 780
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 840
 tccaaagcag tagggccgcg ttgctgctca ctctctgcat agcatggtct gcacctggga
 900
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 960
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 1004

<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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			20					25					30		
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
			35				40					45			
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
			50			55					60				
Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
65					70					75				80	
Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
			85					90					95		
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100				105					110			
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115				120						125			
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
		130			135						140				
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145				150					155					160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170					175		
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
			180				185					190			
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
		195				200					205				
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210				215						220				
Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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120
tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt
180
cctccaattc cccagtgcct tctctcctcc cgggtctgcg cggacgcggc ctcttacct
240
catttgctc cgccctccc cgctcctcta cgcgttttgg tccctgtttg gtgctttctg
300
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360
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420
cctcggcgtc tccggtccgc cctcacttg tgggtggggcg cagctcctgg tccctcagct
480
gcgcgcgcgc ccacgcggcc gggctgcggg tctagggggc cgcctctcc ctggctttcc
540
aagggctaag gtcgtgattc tagggcggct ggcgtccag ggcctcggtg ggggtggcgt
600
gtctgccctt tttatctccc cgcaaggccc ccagtcttct agggaaagcca gtcagtgaag
660
cgcggaggtc cgggcgcgcc gagagagagt ccagtctttg aggaccgagt agtcctgggc
720
cacctccgc ctctgctgtc agaagcagca gctgccgcg tggaatcaa aatttcggga
780
gctgtgacct tttctcatg taaaacgagt agtcttgga gatctgggca taggaaccaa
840
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900
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960
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1020
atagaacagc tcaatcagtg tttgatccaa cacttccatc tcattaagac aagtttgatt
1080
tttctttgct ttttatttca tggaatacat gagaatctct taactgttgg agtttccaag
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1220

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<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

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 Pro Gly Thr Gly Glu Val Glu Asp Ile Glu Gln Leu Asn Gln Cys Leu
 20 25 30
 Ile Gln His Phe His Leu Ile Lys Thr Ser Leu Ile Phe Leu Cys Phe
 35 40 45
 Leu Phe His Gly Ile His Glu Asn Leu Leu Thr Val Gly Val Ser Lys
 50 55 60
 Glu Ala Tyr Leu Met Thr Ser Val Asn Gly Lys Asn Lys Thr Lys Met
 65 70 75 80
 Leu Tyr Gly Gln Ser His Lys Gly Lys Asp
 85 90

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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 120
 cagtgacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
 180
 cttttgaggt gactataact gaagattgct ttacagaagc ccaaaaaggt tttttgagtc
 240
 atgatgcaag aatctgggac tgagacaaaa agtaacggtt cagccatcca gaatgggtcg
 300
 ggcggcagca accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
 360
 acgcccggcg tggacatcgg ggcagctgac ctgcccacg ccagcagca gcagcaacag
 420
 tggcatctca taaaccatca gccctctagg agtcccagca gttggcttaa gagactaatt
 480
 tcaagccctt gggagttgga agtcctgcag gtcccttggt gggagcagtt gctgagacga
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 600
 gagaaatggt tccactgct ttcattgcaa aataaaaatt aaacgaaaaa cagcttaagc
 660
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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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Gln	Asn	Gly	Ser	Gly	Gly	Ser	Asn	His	Leu	Leu	Glu	Cys	Gly	Gly	Leu
		20					25						30		
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly	Ala
		35					40					45			
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu	Ile
	50					55					60				
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu	Ile
65					70					75				80	
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu	Gln
			85					90						95	
Leu	Leu	Arg	Arg	Arg											
			100												

<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacgag
240
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300
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360
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420
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480
ttaactgcaa ctttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgtcgtc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttggaaatc aaggctgcag aggagcaact ttcagccaga
660
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720
ttaaagcaac agactatacc tttgaagaaa aaattggagt cctattttaga cttaatgccg
780
aatcgtctc ttgctcaagt gaaaattgaa gaagcaaagc gagaactaga tagcattgaa
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900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggg
1020

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ttcttactgt gtgttgcat tttgtgcccc aatacatagt tttcatatta aaaagccttt
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 1130

<210> 6172
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 6172
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 20 25 30
 Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr
 35 40 45
 Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
 50 55 60
 Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
 65 70 75 80
 Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
 85 90 95
 Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
 100 105 110
 Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
 115 120 125
 Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
 130 135 140
 Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
 145 150 155 160
 Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
 165 170 175
 Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
 180 185 190
 Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
 195 200 205
 Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
 210 215 220
 Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
 225 230 235 240
 Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
 245 250 255
 Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
 260 265 270
 Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
 275 280 285
 Met Met Glu Leu
 290

<210> 6173
 <211> 1483
 <212> DNA
 <213> Homo sapiens

<400> 6173
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120
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc
180
aaggttttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtgg
240
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc
300
actgctctc ctgcagcttt cctctgtcat ttggataatc tccttcgccc attgttgaag
360
gacgtgctc accctagcga agctaccttc tcctgtgatt gtgtggcaga tgcactgatt
420
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480
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540
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600
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660
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720
gatggaaagc cctttgtcat gaatctgcag gatctgtata tggcagtcac cacacaagag
780
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840
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900
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960
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1080
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1140
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1200
ctgagaatcc cgtgctctcc tctcttttgg tggaggttct gtaggttcag gtttctacca
1260
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1320
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1440
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1483

<210> 6174

<211> 299
 <212> PRT
 <213> Homo sapiens

<400> 6174

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      20             25             30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35             40             45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50             55             60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
65             70             75             80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85             90             95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100            105            110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115            120            125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130            135            140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
145            150            155            160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165            170            175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180            185            190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195            200            205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210            215            220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
225            230            235            240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245            250            255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260            265            270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275            280            285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaagggtgaa
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 240
 tggttgaata gaagtcaaac agtagtgga gagtatttgg cttttcttgg taatcttgta
 300
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 349

<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

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Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro	
		35				40					45				
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70					75					80
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
			85						90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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 120
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 180
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 240
 gccctggaaa acatcagaaa ggagatgaag ttgctggagc aggcagggtc tctgaaaggc
 300
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 360
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 480
 tgtctcatgc cttocaagtt gtttgctggc ttggtccatg tgaagcaatg catcgtggct
 540
 catcctgtga atccgccata ctacatcccg ctggttgagc tgggtcccca cccggagacg
 600

gccctacga cagtggacag aaccacgcc ctgatgaaga agattgganc agtgcctcat
 660
 gcgagtccag aaggaggtgg cgggttcgt tctgaaccgc ctgcaatatg caatcatcag
 720
 cgaggcctgg cggctagtgg aggaaggaat ncgtgtctcc tagtgacctg gnaccttgtc
 780
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 840
 aatgcagaag gtatgttaag ctactgcgac agatacagcg aaggcataaa acatgtccta
 900
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<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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			20					25				30			
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Pro Glu Gly Gly Arg Leu Arg	Ser Glu Pro Pro Ala Ile	Cys Asn
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His Gln Arg Gly Leu Ala Ala	Ser Gly Gly Arg Asn Xaa	Cys Leu Leu
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Val Thr Trp Xaa Leu Val Met	Ser Glu Gly Leu Gly Met	Arg Tyr Ala
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Gln Asp Met Cys Met Lys Val	Pro Asp Asp Pro Glu His	Leu Ala Ala
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<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50					55					60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65					70				75					80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85						90					95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
		100						105					110		
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
	115					120						125			
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130					135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
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Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165						170					175	
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
		180						185				190			
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5361

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705						710				715				720	
Ile	Asn	Lys	His	Phe	His	Asn	Thr	Leu	Glu	His	Leu	Arg	Leu	Arg	Arg
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<210> 6181

<211> 1135

<212> DNA

<213> Homo sapiens

<400> 6181

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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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			20					25					30		
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35					40					45			
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		50				55					60				
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
65					70					75				80	
Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
				85					90					95	
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
		130				135						140			
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
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His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
				165					170					175	
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
			180					185					190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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			50				55					60			
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
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Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
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Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
			130				135					140			
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

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 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val
 195 200 205
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val
 210 215 220
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser
 225 230 235 240
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe
 245 250 255
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys
 260 265 270
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<211> 1231

<212> DNA

<213> Homo sapiens

<400> 6185

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<210> 6186

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6186

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Lys	Tyr	Lys	Ala	Ala	Lys	Asn	Pro	Ser	Pro	Thr	Thr	Arg	Pro	Val	Ser
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				85					90					95	
Ser	Ser	Gly	Arg	Pro	Pro	Ser	Gln	Pro	Asn	Thr	Gln	Asp	Lys	Thr	Pro
			100					105					110		
Ser	Lys	Val	Thr	Ala	Arg	Pro	Ser	Gln	Pro	Pro	Leu	Pro	Arg	Arg	Ser
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<210> 6187

<211> 909

<212> DNA

<213> Homo sapiens

<400> 6187

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 180

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<210> 6188

<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

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		20						25					30		
Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
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Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
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Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
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Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
			85					90					95		
Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
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Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
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Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
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Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
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Met	Asp	Arg	Phe	Leu	Asn	Arg	Phe	His	Leu	Gly	Glu	Pro	Glu	Ala	Ser				
			180					185					190						
Thr	Gln	Phe	Met	Thr	Gln	Asn	Tyr	Gln	Asp	Ser	Pro	Thr	Leu	Gln	Ala				
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Pro	Arg	Glu	Arg	Ala	Ser	Glu	Pro	Lys	His	Lys	Asn	Gln	Ala	Glu	Ile				
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<210> 6189

<211> 2761

<212> DNA

<213> Homo sapiens

<400> 6189

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<210> 6190

<211> 576

<212> PRT

<213> Homo sapiens

<400> 6190

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      35              40              45
Asn Asn Leu Asn Val Glu Glu Asn Ser Ser Gly Asp Gln Arg Arg Ala
      50              55              60
Pro Leu Ala Ala Gly Thr Trp Arg Ser Ala Pro Val Pro Val Thr Thr
      65              70              75              80
Gln Asn Pro Pro Gly Ala Pro Pro Asn Val Leu Trp Gln Thr Pro Leu
      85              90              95
Ala Trp Gln Asn Pro Ser Gly Trp Gln Asn Gln Thr Ala Arg Gln Thr
      100             105             110
Pro Pro Ala Arg Gln Ser Pro Pro Ala Arg Gln Thr Pro Pro Ala Trp
      115             120             125
Gln Thr Gln Asn Pro Val Ala Trp Gln Asn Pro Val Ile Trp Pro Asn
      130             135             140
Pro Val Ile Trp Gln Asn Pro Val Ile Trp Pro Asn Pro Ile Val Trp
      145             150             155             160
Pro Gly Pro Val Val Trp Pro Asn Pro Leu Ala Trp Gln Asn Pro Pro
      165             170             175             180
Gly Trp Gln Thr Pro Pro Gly Trp Gln Thr Pro Pro Gly Trp Gln Gly
      180             185             190
Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp
      195             200             205
Pro Leu Pro Pro Asp Trp Pro Leu Pro Thr Asp Trp Pro Leu Pro Pro
      210             215             220
Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu
      225             230             235             240
Arg Pro Ser Pro Asn Leu Arg Pro Ser Pro Asn Ser Arg Ala Ser Gln
      245             250             255
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      260             265             270
Ala Asn Lys Leu Val Lys Tyr Leu Met Leu Lys Asp Tyr Thr Lys Val
      275             280             285
Pro Ile Lys Arg Ser Glu Met Leu Arg Asp Ile Ile Arg Glu Tyr Thr
      290             295             300
Asp Val Tyr Pro Glu Ile Ile Glu Arg Ala Cys Phe Val Leu Glu Lys
      305             310             315             320
Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr
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385	390	395
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405	410	415
Tyr Arg Arg Val Pro Asn Ser Asn Pro Pro Glu Tyr Glu Phe Leu Trp		
420	425	430
Gly Leu Arg Ser Tyr His Glu Thr Ser Lys Met Lys Val Leu Arg Phe		
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Ile Ala Glu Val Gln Lys Arg Asp Pro Arg Asp Trp Thr Ala Gln Phe		
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485	490	495
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Leu Thr Trp Asp Glu Glu Gly Asp Phe Gly Asp Pro Trp Ser Arg Ile		
515	520	525
Pro Phe Thr Phe Trp Ala Arg Tyr His Gln Asn Ala Arg Ser Arg Phe		
530	535	540
Pro Gln Thr Phe Ala Gly Pro Ile Ile Gly Pro Gly Gly Thr Ala Ser		
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<210> 6191

<211> 3021

<212> DNA

<213> Homo sapiens

<400> 6191

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<211> 815

<212> PRT

<213> Homo sapiens

<400> 6192

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			20					25					30		
Asp	Asp	Thr	His	Tyr	Phe	Val	Met	Thr	Ala	Lys	Lys	Gln	Cys	Leu	Leu
		35					40					45			
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	50					55					60				
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Ala	Ala	Asp	Phe	Ala	Thr	His	Gly	Lys	Leu	Gly	Lys	Leu	Glu	Phe	Ala
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Gln	Asp	Ala	His	Gly	Gln	Pro	Asp	Val	Ser	Ala	Phe	Asp	Phe	Thr	Ser
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<213> Homo sapiens
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<211> 621

<212> PRT

<213> Homo sapiens

<400> 6194

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Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
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Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
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Leu	Arg	Thr	Leu	Asp	Leu	Trp	Arg	Cys	Lys	Asn	Ile	Thr	Glu	Asn	Gly		
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 <212> DNA
 <213> Homo sapiens

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 Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
 50 55 60
 Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
 65 70 75 80
 Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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<212> DNA

<213> Homo sapiens

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<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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			20					25					30		
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	50					55					60				
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			85					90						95	
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
			100					105					110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
		115					120					125			
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155

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<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

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		20						25					30		
Gly	Gln	Trp	Thr	Leu	Gly	Arg	Gly	Ala	Glu	Trp	Ala	Ala	Leu	Arg	Arg
		35					40					45			
Ala	Gly	Leu	Arg	Gly	Cys	Arg	Glu	Glu	Phe	Gly	Gly	Lys	Gly	Gln	Pro
		50				55					60				
Gln	Ser	Leu	Ser	Cys	Ala	Ser	Trp	Glu	Arg	Gly	Met	Thr	Gly	Arg	His
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Thr	Asn	Val	Ser	Gln	Gly	Arg	Trp	Ala	Trp	Gly	His	Arg	Ala	Pro	Arg
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120

<210> 6203

<211> 3462

<212> DNA

<213> Homo sapiens

<400> 6203

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<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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			20					25					30		
Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
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Ala	Arg	Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Thr	Glu	Trp	Ala	Arg
	50					55				60					
Arg	Trp	Arg	Gln	Leu	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Val	Glu
65				70					75					80	
Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
			85					90					95		
His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
			100				105					110			
Lys	Asn	Trp	Gln	Lys	Glu	Ala	Phe	His	Lys	Gln	Met	Met	Gly	Gly	Phe
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Lys	Glu	Thr	Lys	Glu	Ala	Glu	Asp	Gly	Phe	Arg	Lys	Ala	Gln	Lys	Pro
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Trp	Ala	Lys	Lys	Leu	Lys	Glu	Val	Glu	Ala	Ala	Lys	Lys	Ala	His	His
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Ala	Ala	Cys	Lys	Glu	Glu	Lys	Leu	Ala	Ile	Ser	Arg	Glu	Ala	Asn	Ser
			165					170					175		
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Lys	Ile	Glu	Lys	Cys	Lys	Gln	Asp	Val	Leu	Lys	Thr	Lys	Glu	Lys	Tyr
	195					200					205				
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 260 265 270
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 Asn His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp
 290 295 300
 Ser Ala Asp Leu Asn Arg Thr Leu Ser Arg Arg Glu Lys Lys Lys Ala
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 Thr Asp Gly Val Thr Leu Thr Gly Ile Asn Gln Thr Gly Asp Gln Ser
 325 330 335
 Leu Pro Ser Lys Pro Ser Ser Thr Leu Asn Val Pro Ser Asn Pro Ala
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 Gln Ser Ala Gln Ser Gln Ser Ser Tyr Asn Pro Phe Glu Asp Glu Asp
 355 360 365
 Asp Thr Gly Ser Thr Val Ser Glu Lys Asp Asp Thr Lys Ala Lys Asn
 370 375 380
 Val Ser Ser Tyr Glu Lys Thr Gln Ser Tyr Pro Thr Asp Trp Ser Asp
 385 390 395 400
 Asp Glu Ser Asn Asn Pro Phe Ser Ser Thr Asp Ala Asn Gly Asp Ser
 405 410 415
 Asn Pro Phe Asp Asp Asp Ala Thr Ser Gly Thr Glu Val Arg Val Arg
 420 425 430
 Ala Leu Tyr Asp Tyr Glu Gly Gln Glu His Asp Glu Leu Ser Phe Lys
 435 440 445
 Ala Gly Asp Glu Leu Thr Lys Met Glu Asp Glu Asp Glu Gln Gly Trp
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<210> 6205

<211> 926

<212> DNA

<213> Homo sapiens

<400> 6205

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<211> 92

<212> PRT

<213> Homo sapiens

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
			35				40						45		
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
			50			55						60			
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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<210> 6208

<211> 290

<212> PRT

<213> Homo sapiens

<400> 6208

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		20					25					30			
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
	35					40					45				
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Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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<212> DNA
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<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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			20					25					30		
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
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			100					105					110		
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			115				120					125			
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			130				135				140				
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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<211> 209

<212> PRT

<213> Homo sapiens

<400> 6212

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			20					25					30		
Lys	Gln	Glu	Leu	Ala	Glu	Thr	Leu	Ala	Asn	Leu	Glu	Arg	Gln	Ile	Tyr
		35					40					45			
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	50					55				60					
Ile	Arg	Gly	Trp	Xaa	Ser	Val	Ser	Asp	Gln	Pro	Xaa	Lys	Asn	Ser	Asn
65					70					75				80	
Ser	Lys	Asn	Asp	Arg	Arg	Asn	Arg	Lys	Phe	Lys	Glu	Ala	Glu	Arg	Leu
			85						90				95		
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		115					120					125			
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Gln	Lys	Ala	Ala	Ser	Ser	Thr	Ser	Ser	Gly	Ser	His	His	Ser	Ser	His
			165						170				175		
Lys	Lys	Arg	Lys	Asn	Lys	Asn	Arg	His	Ser	Pro	Ser	Gly	Met	Phe	Asp
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Tyr

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<211> 1160

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Glu	Pro	Ala	Xaa	Cys	Leu	His	Gln	Thr	Gly	Pro	His	Leu	Gly	Pro	Pro
			35				40					45			
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			50			55					60				
Val	Met	Met	Glu	Gln	Ile	Arg	Pro	Trp	His	Ser	Arg	Met	Lys	Arg	Arg
65					70					75				80	
Lys	Gly	Val	Met	Glu	Gly	Gln	Ser	Leu	Glu	Pro	Ala	Ala	Ser	Ser	Gly
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 <212> DNA
 <213> Homo sapiens

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<210> 6216
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 <213> Homo sapiens

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 35 40 45
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<210> 6217
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<400> 6217

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<210> 6218

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
65             70             75             80
Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
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Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
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<212> DNA

<213> Homo sapiens

<400> 6219

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 <212> PRT
 <213> Homo sapiens

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 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
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 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
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 Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp
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 Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro
 100 105 110
 Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg
 115 120 125
 Leu Val Lys Ala Glu Leu Asn Ser Ser Asn Glu Ser Ala Gly Trp Ala
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<210> 6221
 <211> 1487
 <212> DNA
 <213> Homo sapiens

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<210> 6222

<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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			20					25					30		
Lys	Leu	His	Lys	Cys	Lys	Glu	Phe	Val	Asp	Ser	Cys	Arg	Leu	Thr	Phe
		35					40					45			
Pro	Thr	Ser	Gly	Asp	Glu	Tyr	Ser	Arg	Gly	Phe	Leu	Gln	Asn	Leu	Asn
		50				55					60				
Leu	Ile	Gln	Asp	Gln	Asn	Ala	Gln	Thr	Arg	Trp	Lys	Gln	Gly	Arg	Tyr
65					70				75					80	
Asp	Glu	Asp	Gly	Lys	Pro	Phe	Asn	Gln	Arg	Ser	Leu	Leu	Leu	Gly	His
				85					90					95	
Glu	Arg	Ile	Leu	Thr	Arg	Ala	Lys	Ser	Tyr	Glu	Cys	Ser	Glu	Cys	Gly

	100		105		110
Lys Val Ile Arg Arg Lys Ala Trp Phe Asp Gln His Gln Arg Ile His					
115		120		125	
Phe Leu Glu Asn Pro Phe Glu Cys Lys Val Cys Gly Gln Ala Phe Arg					
130	135		140		
Gln Arg Ser Ala Leu Thr Val His Lys Gln Cys His Leu Gln Asn Lys					
145	150		155		160
Pro Tyr Arg Cys His Asp Cys Gly Lys Cys Phe Arg Gln Leu Ala Tyr					
	165		170		175
Leu Val Glu His Lys Arg Ile His Thr Lys Glu Lys Pro Tyr Lys Cys					
	180		185		190
Ser Lys Cys Glu Lys Thr Phe Ser Gln Asn Ser Thr Leu Ile Arg His					
	195		200		205
Gln Val Ile His Ser Gly Glu Lys Arg His Lys Cys Leu Glu Cys Gly					
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Lys Ala Phe Gly Arg His Ser Thr Leu Leu Cys His Gln Gln Ile His					
225	230		235		240
Ser Lys Pro Asn Thr His Lys Cys Ser Glu Cys Gly Gln Ser Phe Gly					
	245		250		255
Arg Asn Val Asp Leu Ile Gln His Gln Arg Ile His Thr Lys Glu Glu					
	260		265		270
Phe Phe Gln Cys Gly Glu Cys Gly Lys Thr Phe Ser Phe Lys Arg Asn					
	275		280		285
Leu Phe Arg His Gln Val Ile His Thr Gly Ser Gln Leu Tyr Gln Cys					
	290		295		300
Val Ile Cys Gly Lys Ser Phe Lys Trp His Thr Ser Phe Ile Lys His					
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<210> 6223

<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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<211> 156

<212> PRT

<213> Homo sapiens

<400> 6224

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		20						25				30			
Ala	Glu	Gly	His	Val	Gly	Gln	Gly	Ala	Pro	Gly	Leu	Met	Gly	Asn	Met
		35				40					45				
Asn	Pro	Glu	Gly	Gly	Val	Asn	His	Glu	Asn	Gly	Met	Asn	Arg	Asp	Gly
	50					55				60					
Gly	Met	Ile	Pro	Glu	Gly	Gly	Gly	Gly	Asn	Gln	Glu	Pro	Arg	Gln	Gln
65				70					75					80	
Pro	Gln	Pro	Pro	Pro	Glu	Glu	Pro	Ala	Gln	Ala	Ala	Met	Glu	Gly	Pro
			85					90					95		
Gln	Pro	Glu	Asn	Met	Gln	Pro	Arg	Thr	Arg	Arg	Thr	Lys	Phe	Thr	Leu
		100					105					110			
Leu	Gln	Val	Glu	Glu	Leu	Glu	Ser	Val	Phe	Arg	His	Thr	Gln	Tyr	Pro
		115					120				125				
Asp	Val	Pro	Thr	Arg	Arg	Glu	Leu	Ala	Glu	Asn	Leu	Gly	Val	Thr	Glu
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<210> 6225

<211> 3851

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6226

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		20						25				30			
Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
		35				40					45				
Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
		50				55					60				
Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys
65				70						75				80	
Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
			85					90					95		
Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys
			100					105					110		
Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe
			115					120				125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
			130			135						140			
Ile	Gln	Thr	Arg	Gly	Glu	Ala	Ala	Ala	Ser	Gln	Leu	Ile	Leu	Tyr	His
145				150						155				160	
Tyr	Pro	Glu	Leu	Lys	Glu	Glu	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu
			165					170					175		
Met	Asp	Ser	Thr	Phe	Leu	Asn	Val	Ala	Glu	Ala	Gln	Cys	Ile	Ala	Asn
			180					185				190			
Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
			195				200					205			
Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
			210			215						220			
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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Gln	Asn	Gln	Asn	Lys	Thr										

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<210> 6227

<211> 830

<212> DNA

<213> Homo sapiens

<400> 6227

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<210> 6228

<211> 271

<212> PRT

<213> Homo sapiens

<400> 6228

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20           25           30
Ile Pro Ser Pro Gly Arg Val Ala Glu Trp Glu Val Gln Asn Arg
35           40           45
Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
50           55           60
Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
65           70           75           80
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<212> DNA
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<212> PRT

<213> Homo sapiens

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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
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Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
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Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
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Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
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Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
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Cys	Arg	Ala	Pro	Gly	Gly	Phe	Met	Ser	Asn	Arg	Phe	Val	Glu	Thr	Asn
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Phe	Phe	Gln	Glu	Leu	Ser	Lys	Ser	Leu	Asp	Ala	Phe	Pro	Glu	Asp	Phe
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Cys	Arg	His	Lys	Val	Leu	Pro	Gln	Leu	Leu	Thr	Ala	Phe	Glu	Phe	Gly
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Asn	Ala	Gly	Ala	Val	Val	Leu	Thr	Pro	Leu	Phe	Lys	Val	Gly	Lys	Phe
			340					345					350		
Leu	Ser	Ala	Glu	Glu	Tyr	Gln	Gln	Lys	Ile	Ile	Pro	Val	Val	Val	Lys
		355					360					365			
Met	Phe	Ser	Ser	Thr	Asp	Arg	Ala	Met	Arg	Ile	Arg	Leu	Leu	Gln	Gln
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Ile	Phe	Pro	His	Val	Val	His	Gly	Phe	Leu	Asp	Thr	Asn	Pro	Ala	Ile
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Arg	Glu	Gln	Thr	Val	Lys	Ser	Met	Leu	Leu	Leu	Ala	Pro	Lys	Leu	Asn
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Glu	Ala	Asn	Leu	Asn	Val	Glu	Leu	Met	Lys	His	Phe	Ala	Arg	Leu	Gln
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Ala	Lys	Asp	Glu	Gln	Gly	Pro	Ile	Arg	Cys	Asn	Thr	Thr	Val	Cys	Leu
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Gly	Lys	Ile	Gly	Ser	Tyr	Leu	Ser	Ala	Ser	Thr	Arg	His	Arg	Val	Leu
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Thr	Ser	Ala	Phe	Ser	Arg	Ala	Thr	Arg	Asp	Pro	Phe	Ala	Pro	Ser	Arg
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Val	Ala	Gly	Val	Leu	Gly	Phe	Ala	Ala	Thr	His	Asn	Leu	Tyr	Ser	Met
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		515					520					525			
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Phe	Leu	Ser	Lys	Leu	Glu	Ser	Val	Ser	Glu	Asp	Pro	Thr	Gln	Leu	Glu
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Glu	Glu	Asp	Lys	Asp	Thr	Ala	Glu	Asp	Ser	Ser	Thr	Ala	Asp	Arg	Trp
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 675 680 685
 Gln Val Ser Asn Ser Asp His Lys Ser Ser Lys Ser Pro Glu Ser Asp
 690 695 700
 Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp Glu Gln Gly Trp Gln Glu
 705 710 715 720
 Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly Thr Arg Leu Ala Ser Glu
 725 730 735
 Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp Lys Gly Asp Pro Phe Ala
 740 745 750
 Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly
 755 760 765
 Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala
 770 775 780
 Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Glu Met Glu Ala
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<210> 6237

<211> 494

<212> DNA

<213> Homo sapiens

<400> 6237

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<210> 6238

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6238

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	20	25	30
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
	35	40	45
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
	50	55	60
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65	70	75	80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
	85	90	95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
	100	105	110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
	115	120	125
Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
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<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6239

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<210> 6240
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<212> PRT
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<400> 6240
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35 40 45
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
50 55 60
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
65 70 75 80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
85 90 95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
100 105 110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
115 120 125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
130 135 140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
145 150 155 160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
165 170 175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
180 185 190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
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Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln
225 230 235

<210> 6241
<211> 1515
<212> DNA
<213> Homo sapiens

<400> 6241
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240

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<210> 6242

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6242

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 Gly Glu Pro Pro Pro Pro Glu Leu Ala Leu Leu Pro Pro Pro Pro
 50 55 60
 Pro Pro Pro Thr Pro Ala Thr Pro Thr Ser Ser Ala Ser Asn Leu Asp
 65 70 75 80
 Leu Gly Glu Gln Arg Asp Ala Trp Glu Thr Phe Gln Lys Arg Gln Lys
 85 90 95
 Leu Thr Ser Glu Gly Ala Ala Lys Leu Leu Leu Asp Thr Phe Glu Tyr
 100 105 110
 Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
 115 120 125
 Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
 130 135 140
 Ser Ile Cys Lys Lys Lys Gln Asn Arg His Phe Ile Val Pro Ala Ser
 145 150 155 160
 Arg Phe Lys Leu Leu Lys Gly Ala Glu His Ile Thr Thr Tyr Thr Phe
 165 170 175
 Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln
 180 185 190
 Ser Phe Tyr Thr Pro Arg Ser Asn Pro Gly Gly Phe Gly Ile Ala Pro
 195 200 205
 His Cys Leu Asp Glu Gly Thr Val Arg Ser Met Val Thr Glu Glu Phe
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 Asn Gly Ser Asp Trp Glu Lys Ala Met Lys Glu His Lys Thr Ile Lys
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 Asn Met Ser Lys Glu
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<210> 6243

<211> 326

<212> DNA

<213> Homo sapiens

<400> 6243

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180

ctagcaaagc tgggaatggc cttccacaag aggaaaccta agactggacc cagaatagta
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<210> 6244

<211> 104

<212> PRT

<213> Homo sapiens

<400> 6244

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Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
      35           40           45
Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
      50           55           60
Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
65           70           75           80
Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
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<210> 6245

<211> 6609

<212> DNA

<213> Homo sapiens

<400> 6245

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960

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<213> Homo sapiens

<400> 6246

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<210> 6249

<211> 1217

<212> DNA

<213> Homo sapiens

<400> 6249

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 480

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<210> 6250

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6250

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		20					25				30				
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Val	Ala	Gly	Phe	Val	His	His	Gly	Thr	Val	Leu	Asp	Cys	Glu	Glu	Lys
			85				90						95		
Asp	Trp	Asp	Phe	Ser	Met	Asn	Leu	Asn	Val	Arg	Ser	Met	Tyr	Leu	Met
	100					105						110			
Ile	Lys	Ala	Phe	Leu	Pro	Lys	Met	Leu	Ala	Gln	Lys	Ser	Gly	Asn	Ile
	115					120						125			
Ile	Asn	Met	Ser	Ser	Val	Ala	Ser	Ser	Val	Lys	Gly	Val	Val	Asn	Arg
	130					135					140				
Cys	Val	Tyr	Ser	Thr	Thr	Lys	Ala	Ala	Val	Ile	Gly	Leu	Thr	Lys	Ser
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<210> 6251
<211> 1611
<212> DNA
<213> Homo sapiens
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<210> 6252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
			20					25					30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
			35				40					45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
			50			55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70				75					80		
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
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			100												

<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 240

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 1920
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 1953

<210> 6254
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 6254
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 Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro
 35 40 45
 Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
 50 55 60
 Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
 65 70 75 80
 Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
 85 90 95
 Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
 100 105 110
 Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
 115 120 125
 Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
 130 135 140
 Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
 145 150 155 160
 His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu
 165 170 175
 Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
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 Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile
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 Glu Lys Leu Gly Ser Lys Asp Arg
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<210> 6255
 <211> 622
 <212> DNA
 <213> Homo sapiens

<400> 6255
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 180
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<210> 6256

<211> 150

<212> PRT

<213> Homo sapiens

<400> 6256

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Lys	Lys	Lys	Ala	Thr	Val	Ala	Ala	Phe	Thr	Ala	Ser	Glu	Gly	His	Ala
			20					25					30		
His	Pro	Arg	Val	Val	Glu	Leu	Pro	Lys	Thr	Asp	Glu	Gly	Leu	Gly	Phe
		35				40					45				
Asn	Ile	Met	Gly	Gly	Lys	Glu	Gln	Asn	Ser	Pro	Ile	Tyr	Ile	Ser	Arg
	50					55					60				
Val	Ile	Pro	Gly	Gly	Val	Ala	Asp	Arg	His	Gly	Gly	Leu	Lys	Arg	Gly
65				70				75					80		
Asp	Gln	Leu	Leu	Ser	Val	Asn	Gly	Val	Ser	Val	Glu	Gly	Glu	Gln	His
			85					90					95		
Glu	Lys	Ala	Val	Glu	Leu	Leu	Lys	Ala	Ala	Gln	Gly	Ser	Val	Lys	Leu
			100					105					110		
Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
		115				120					125				
Glu	Lys	Met	Arg	Ser	Ala	Arg	Arg	Arg	Gln	Gln	His	Gln	Ser	Tyr	Ser
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<210> 6257

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 6257

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<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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Phe	Gln	Ala	Leu	Gln	Arg	Leu	His	Met	Thr	Ile	Phe	Ser	Gln	Ser	Val
			20					25					30		
Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
		35					40					45			
Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
	50					55					60				
Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
65				70					75					80	
Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
				85					90					95	
Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
			100					105					110		
Leu	Trp	Arg	Arg	Gln	Pro	Pro	Tyr	Arg	Thr	Ser	Leu	Glu	Val	Pro	Glu
	115						120					125			
Ile	Asn	Ala	Leu	Leu	Leu	Val	Pro	Lys	Glu	Asn	Ser	Leu	Ile	Leu	Ala
	130					135					140				
Gly	Gly	Asp	Cys	Gln	Leu	His	Thr	Met	Asp	Leu	Glu	Thr	Gly	Thr	Phe
145					150				155						160
Thr	Arg	Val	Leu	Arg	Gly	His	Thr	Asp	Tyr	Ile	His	Cys	Leu	Ala	Leu
				165				170						175	
Arg	Glu	Arg	Ser	Pro	Glu	Val	Leu	Ser	Gly	Gly	Glu	Asp	Gly	Ala	Val
			180					185					190		
Arg	Leu	Trp	Asp	Leu	Arg	Thr	Ala	Lys	Glu	Val	Gln	Thr	Ile	Glu	Ser
	195						200					205			
Ile	Ser	Thr	Arg	Ser	Ala	Arg	Gly	Pro	Thr	Met	Gly	Ala	Gly	Leu	Asp
	210					215					220				
Val	Trp	Thr	Asp	Ser	Asp	Trp	Met	Val	Cys	Gly	Gly	Gly	Pro	Ala	Leu
225					230				235						240
Thr	Leu	Trp	His	Leu	Arg	Ser	Ser	Thr	Pro	Thr	Thr	Ile	Phe	Pro	Ile
				245				250						255	
Arg	Ala	Pro	Gln	Lys	His	Val	Thr	Phe	Tyr	Gln	Asp	Leu	Ile	Leu	Ser

	260		265		270										
Ala	Gly	Gln	Gly	Arg	Cys	Val	Asn	Gln	Trp	Gln	Leu	Ser	Gly	Glu	Leu
	275		280		285										
Lys	Ala	Gln	Val	Pro	Gly	Ser	Ser	Pro	Gly	Leu	Leu	Ser	Leu	Ser	Leu
	290		295		300										
Asn	Gln	Gln	Pro	Ala	Ala	Pro	Glu	Cys	Lys	Val	Leu	Thr	Ala	Ala	Gly
305			310							315					320
Asn	Ser	Cys	Arg	Val	Asp	Val	Phe	Thr	Asn	Leu	Gly	Tyr	Arg	Ala	Phe
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Ser	Leu	Ser	Phe												
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<210> 6259

<211> 384

<212> DNA

<213> Homo sapiens

<400> 6259

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<210> 6260

<211> 128

<212> PRT

<213> Homo sapiens

<400> 6260

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Leu	Glu	Ile	Pro	Asp	Ala	Phe	Asp	Arg	Thr	Glu	Asn	Met	Leu	Ser	Met
			20					25					30		
Gln	Lys	Asn	Glu	Lys	Ile	Lys	Tyr	Ser	Arg	Phe	Ala	Ala	Thr	Asn	Thr
		35				40						45			
Arg	Val	Lys	Ala	Lys	Gln	Lys	Pro	Leu	Ile	Ser	Asn	Ser	His	Thr	Asp
	50				55						60				
His	Leu	Met	Gly	Cys	Thr	Lys	Ser	Ala	Glu	Pro	Gly	Thr	Glu	Thr	Ser
65				70					75					80	
Gln	Val	Asn	Ser	Phe	Ser	Asp	Leu	Lys	Ala	Ser	Thr	Leu	Val	His	Lys
			85					90						95	
Pro	Gln	Ser	Asp	Phe	Thr	Asn	Asp	Ala	Leu	Ser	Pro	Lys	Phe	Asn	Leu
			100					105					110		
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115 120 125

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 <211> 3619
 <212> DNA
 <213> Homo sapiens

<400> 6261
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<211> 431

<212> PRT

<213> Homo sapiens

<400> 6262

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370	375	380
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<210> 6263

<211> 2508

<212> DNA

<213> Homo sapiens

<400> 6263

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<212> PRT

<213> Homo sapiens

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Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
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Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser
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<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

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Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn His Asn			
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His Ala Asn Glu Arg Met Leu Phe His Gly Ser Pro Phe Val Asn Ala			
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Ile Ile His Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly Gly Met			
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<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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<211> 307
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<400> 6270
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 35 40 45
 Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
 50 55 60
 Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
 65 70 75 80
 Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
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 Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
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 Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
 115 120 125
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 Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
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 Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
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 Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
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 Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
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 225 230 235 240
 Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
 245 250 255
 Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
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 <212> DNA
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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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		260						265				270			
Gln	Ile	Pro	Asn	Thr	Ala	Ile	Val	Leu	Ser	Thr	Tyr	Glu	Leu	Ile	Val
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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<210> 6274

<211> 70

<212> PRT

<213> Homo sapiens

<400> 6274

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			20					25					30		
Ala	Ala	Tyr	Leu	Gly	Met	Ala	Tyr	Val	Ala	Val	Gln	Val	Ser	Ser	Ala
			35				40					45			
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<210> 6275

<211> 1534

<212> DNA

<213> Homo sapiens

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<211> 172

<212> PRT

<213> Homo sapiens

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			20					25					30		
Asp	Asp	Leu	Ser	Asn	Ala	Ala	Arg	Glu	Leu	Arg	Val	Leu	Ile	Asp	Asp
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Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
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Gly Ser Gly Leu Ile Trp Arg Arg Leu Leu Ser Phe Leu Gly Arg Gln
          115          120          125
Leu Glu Ala Pro Leu Pro Pro Met Met Ala Ser Leu Pro Lys Lys Thr
          130          135          140
Leu Leu Ala Asp Arg Ser Met Glu Leu Lys Asn Ser Leu Arg Leu Asp
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Gly Leu Gly Ser Gly Arg Ser Ile Leu Thr Asn Arg
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<210> 6277

<211> 1206

<212> DNA

<213> Homo sapiens

<400> 6277

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<210> 6278
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<400> 6278
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 Asp Gly Ser Thr Val Val Pro Ala Gly Pro Glu Pro Pro Pro Gln Ser
 50 55 60
 Ser Arg Ala Glu Ser Ser Ser Gly Gly Gly Thr Val Pro Ser Ser Ala
 65 70 75 80
 Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly Asp Gly Ser Pro Pro Lys
 85 90 95
 Pro Lys Asp Pro Val Ser Ala Ala Val Pro Ala Pro Xaa Glu Lys Gln
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 Gln Ser Asp Ser Ile Trp Pro Lys Ser Ala Pro Gly Ser Cys Trp Leu
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 His Thr Leu Arg Arg Ala Val Lys Lys Pro Ala Pro Ala Pro Pro Lys
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 Pro Gly Asn Pro Pro Gly His Pro Gly Gly Gln Ser Ser Ser Gly
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 Thr Ser Gln His Pro Pro Ser Leu Ser Pro Lys Pro Pro Thr Arg Ser
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 Pro Pro Pro Ser Ser Gln His Pro Gly Gly Thr Pro Xaa Ser Leu Ser
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 225 230 235 240
 Thr Pro Leu Met His Thr Lys Pro Asn Ser Gln Gly Pro Pro Asn Pro
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 Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro Pro Leu Gly Lys Gln Asn
 275 280 285
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 Ala Gln Pro His Ala Gly Thr Leu Pro Arg Pro Arg Pro Val Pro Lys

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Lys Ile Val Thr Asp Ser Asn Ser Arg Val Ser Glu Pro His Arg Ser
          355          360          365
Ile Phe Pro Glu Met His Ser Asp Ser Ala Ser Lys Asp Val Pro Gly
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<210> 6279

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<211> 741

<212> DNA

<213> Homo sapiens

<400> 6281

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<212> PRT

<213> Homo sapiens

<400> 6282

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			20				25					30			
Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
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<212> DNA

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<212> PRT

<213> Homo sapiens

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Lys	Pro	Ile	His	Val	Phe	Phe	Gly	Ala	Ala	Ile	Leu	Ser	Leu	Ser	Ile
		35					40					45			
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		50				55				60					
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<212> DNA

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<210> 6286

<211> 57

<212> PRT

<213> Homo sapiens

<400> 6286

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Ala	Gly	Asn	Ile	Tyr	Leu	Gly	Thr	Ser	Pro	Pro	Ser	Gln	Glu	Pro	Ser
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<210> 6287

<211> 1674

<212> DNA

<213> Homo sapiens

<400> 6287

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<210> 6288

<211> 269
 <212> PRT
 <213> Homo sapiens

<400> 6288
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 35 40 45
 Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
 50 55 60
 Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser
 65 70 75 80
 Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
 85 90 95
 Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
 100 105 110
 Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
 115 120 125
 Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
 130 135 140
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 145 150 155 160
 Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
 165 170 175
 Ala Phe Thr Ser Tyr Gly Ile Ser Pro Gln Ala Lys Gln Trp Phe Ser
 180 185 190
 Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr
 195 200 205
 Asp Ser Phe Val Asn Lys Leu Asp Pro Ser Lys Val Phe Lys Ser Lys
 210 215 220
 Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly
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<210> 6289
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 <212> DNA
 <213> Homo sapiens

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<210> 6290

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6290

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			20					25					30		
Ser	Pro	Asp	Glu	Gly	Leu	Ile	Glu	Asp	Leu	Thr	Ile	Glu	Asp	Lys	Ala
			35				40					45			
Val	Glu	Gln	Leu	Ala	Glu	Gly	Leu	Leu	Ser	His	Tyr	Leu	Pro	Asp	Leu
			50				55					60			
Gln	Arg	Ser	Lys	Gln	Ala	Leu	Gln	Glu	Leu	Thr	Gln	Asn	Gln	Val	Val

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Leu	Leu	Asp	Thr	Leu	Glu	Gln	Glu	Ile	Ser	Lys	Phe	Lys	Glu	Cys	His
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Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His
		100		105		110									
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
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Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln
		130		135		140									
Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu	Arg
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<210> 6291

<211> 2718

<212> DNA

<213> Homo sapiens

<400> 6291

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<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu
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Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	Ser	Arg	Trp
	50				55					60					
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65				70					75					80	
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro
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		100					105						110		
Asp	Leu	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val
	115					120						125			
Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu
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		180					185						190		
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Val	Val	Phe	Lys	Glu	Thr	Thr	Leu	Ser	Tyr	Tyr	Lys	Ser	Gln	Asp	Glu
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Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu
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Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile
385          390          395          400
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          405          410          415
Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val
          420          425          430
Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn
          435          440          445
Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr
          450          455          460
Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu
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<210> 6293

<211> 750

<212> DNA

<213> Homo sapiens

<400> 6293

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<210> 6294
 <211> 250
 <212> PRT
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<400> 6294
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 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser
 50 55 60
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser
 65 70 75 80
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys
 85 90 95
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
 100 105 110
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
 130 135 140
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
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 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
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 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
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 <212> DNA
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<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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			20					25					30		
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala
		35					40					45			
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala
	50				55						60				
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg
65					70					75					80
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys
				85					90					95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val
		100						105					110		
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val
		115					120					125			
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val
	130					135					140				
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro
145					150					155					160
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro
			165					170						175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe
		180					185					190			
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val
	195						200					205			
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
210					215						220				
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro
225				230						235					240
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys
			245						250					255	
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
		260						265					270		
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys
	275						280					285			
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu
	290					295					300				
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr

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305          310          315          320
Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
          370          375          380
Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
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<210> 6297

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6297

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240
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360
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<210> 6298

<211> 146

<212> PRT

<213> Homo sapiens

<400> 6298

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          20          25          30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
          35          40          45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
          50          55          60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65          70          75          80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
          85          90          95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115		120		125										
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
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Cys	Ala														
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<210> 6299

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 6299

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120
ggcggccagc ccgcccattg gccagggag agcctgggtc tgtaccactg gaccagtc
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240
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480
gcctacacgc atggctgcat cctgcacccc gagctcacca ccgactccat gatccccaag
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1200

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<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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			20					25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
		35					40					45			
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
	50					55					60				
Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
65					70					75					80
Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
				85					90					95	
Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
			100					105					110		
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
	115						120					125			
Gly	Glu	His	Val	Val	Ala	Leu	Met	Pro	Glu	Val	Gly	Ser	Leu	Gln	His
	130					135					140				
Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
145					150					155					160
Ala	Tyr	Thr	His	Gly	Cys	Ile	Leu	His	Pro	Glu	Leu	Thr	Thr	Asp	Ser
				165					170					175	
Met	Ile	Pro	Lys	Tyr	Ala	Thr	Ala	Glu	Ile	Arg	Arg	His	Leu	Ala	Asn
			180					185					190		
Ala	Thr	Thr	Asp	Leu	Met	Lys	Leu	Asp	His	Glu	Glu	Glu	Pro	Gln	Leu
	195						200					205			
Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
	210					215					220				
Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
225					230					235					240
Met	Val	Leu	Asp	Gln	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Arg	Lys	Leu	Glu
				245					250					255	
Asn	Glu	Gly	Gln	Lys	Cys	Glu	Leu	Trp	Leu	Cys	Gly	Cys	Ala	Phe	Thr
			260					265					270		
Leu	Ala	Asp	Val	Leu	Leu	Gly	Ala	Thr	Leu	His	Arg	Leu	Lys	Phe	Leu
	275						280					285			
Gly	Leu	Ser	Lys	Lys	Tyr	Trp	Glu	Asp	Gly	Ser	Arg	Pro	Asn	Leu	Gln

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      290              295              300
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Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe
              325              330              335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu
              340              345              350
Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys
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Lys Lys Tyr Ile
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<210> 6301

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6301

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180
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240
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<210> 6302

<211> 202

<212> PRT

<213> Homo sapiens

<400> 6302

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 35 40 45
 Ser Ser Val Ser Arg Gly Asn Val Ser Thr Pro Pro Arg His Ser Ser
 50 55 60
 Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
 65 70 75 80
 Phe Arg Ser Ser Thr Pro Thr Gly Ser Glu Tyr Asp Glu Glu Glu Val
 85 90 95
 Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
 100 105 110
 Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
 115 120 125
 Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
 130 135 140
 Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
 145 150 155 160
 Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
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 Thr Ala Gln Gly Leu Arg His His Thr Ile Asn Phe His Pro Pro Val
 180 185 190
 Ser Ala Glu Ile Ile Arg Lys Met Gln Gln
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<210> 6303

<211> 676

<212> DNA

<213> Homo sapiens

<400> 6303

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<210> 6304
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg
 50 55 60
 Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg
 65 70 75 80
 Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp
 85 90 95
 Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala
 100 105 110
 Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln
 115 120 125
 Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser
 130 135 140
 Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala
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<210> 6306

<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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			20					25					30		
Thr	Trp	Asp	Ser	Thr	Phe	Cys	Ala	Val	Asn	Pro	Lys	Phe	Leu	Ala	Val
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Lys	Thr	Gly	Arg	Ile	Asp	Lys	Ala	Tyr	Pro	Thr	Val	Cys	Gly	His	Thr
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Asn	Gly	Leu	Thr	Ser	Pro	Leu	Thr	Glu	Pro	Val	Val	Val	Leu	Glu	Gly
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His	Thr	Lys	Arg	Val	Gly	Ile	Ile	Ala	Trp	His	Pro	Thr	Ala	Arg	Asn
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Val	Ala	Glu	Arg	Glu	Lys	Ala	His	Glu	Gly	Ala	Arg	Pro	Met	Arg	Ala
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Leu Asn Thr Phe Ser Ser	Lys Glu Pro Gln Arg	Gly Met Gly Tyr Met
305	310	315
Pro Lys Arg Gly Leu Asp	Val Asn Lys Cys Glu	Ile Ala Arg Phe Phe
325	330	335
Lys Leu His Glu Arg Lys	Cys Glu Pro Ile Ile	Met Thr Val Pro Arg
340	345	350
Lys Ser Asp Leu Phe Gln	Asp Asp Leu Tyr Pro	Asp Thr Ala Gly Pro
355	360	365
Glu Ala Ala Leu Glu Ala	Glu Glu Trp Phe Glu	Gly Lys Asn Ala Asp
370	375	380
Pro Ile Leu Ile Ser Leu	Lys His Gly Tyr Ile	Pro Gly Lys Asn Arg
385	390	395
Asp Leu Lys Val Val Lys	Lys Asn Ile Leu Asp	Ser Lys Pro Thr Ala
405	410	415
Asn Lys Lys Cys Asp Leu	Ile Ser Ile Pro Lys	Lys Thr Thr Asp Thr
420	425	430
Ala Ser Val Gln Asn Glu	Ala Lys Leu Asp Glu	Ile Leu Lys Glu Ile
435	440	445
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<210> 6307

<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<210> 6308

<211> 483

<212> PRT

<213> Homo sapiens

<400> 6308

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      35              40              45
Phe Ile Gln Arg Phe Glu Met Lys Arg Ser Pro Glu Glu Lys Gln Glu
      50              55              60
Met Leu Gln Thr Glu Gly Ser Gln Cys Ala Lys Thr Phe Ile Asn Leu
65              70              75              80
Met Thr His Ile Cys Lys Glu Gln Thr Val Gln Tyr Ile Leu Thr Met
      85              90              95
Val Asp Asp Met Leu Gln Glu Asn His Gln Arg Val Ser Ile Phe Phe
      100             105             110
Asp Tyr Ala Arg Cys Ser Lys Asn Thr Ala Trp Pro Tyr Phe Leu Pro
      115             120             125
Met Leu Asn Arg Gln Asp Pro Phe Thr Val His Met Ala Ala Arg Ile
      130             135             140
Ile Ala Lys Leu Ala Ala Trp Gly Lys Glu Leu Met Glu Gly Ser Asp
145              150              155              160
Leu Asn Tyr Tyr Phe Asn Trp Ile Lys Thr Gln Leu Ser Ser Gln Lys
      165              170              175
Leu Arg Gly Ser Gly Val Ala Val Glu Thr Gly Thr Val Ser Ser Ser
      180             185             190
Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met
      195             200             205
Leu Arg Val Asn Glu Tyr Arg Phe Ala Trp Val Glu Ala Asp Gly Val
      210             215             220
Asn Cys Ile Met Gly Val Leu Ser Asn Lys Cys Gly Phe Gln Leu Gln
225              230              235              240
Tyr Gln Met Ile Phe Ser Ile Trp Leu Leu Ala Phe Ser Pro Gln Met
      245              250              255
Cys Glu His Leu Arg Arg Tyr Asn Ile Ile Pro Val Leu Ser Asp Ile
      260             265             270
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Tyr Ala Leu Ala Met Ile Gln Cys Lys Val Leu Lys Gln Leu Glu Asn
305              310              315              320
Leu Glu Gln Gln Lys Tyr Asp Asp Glu Asp Ile Ser Glu Asp Ile Lys
      325              330              335
Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe
      340             345             350
Asp Glu Tyr Ser Ser Glu Leu Lys Ser Gly Arg Leu Glu Trp Ser Pro
      355             360             365
Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
      370             375             380
Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val
385              390              395              400
Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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 Gly Lys Gln Leu Val Met Asn His Met His His Glu Asp Gln Gln Val
 420 425 430
 Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp
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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6309

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<210> 6310

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6310

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 35 40 45
 Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala
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<210> 6311

<211> 1548

<212> DNA

<213> Homo sapiens

<400> 6311

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1320

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<210> 6312

<211> 234

<212> PRT

<213> Homo sapiens

<400> 6312

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	20						25					30			
Leu	Asp	Glu	Tyr	Lys	Glu	Gln	Tyr	Phe	Ser	Leu	Arg	Pro	Asp	Leu	Lys
	35					40					45				
Thr	Lys	Ser	Tyr	Gly	Asn	Ile	Ser	Glu	Arg	Val	Glu	Leu	Arg	Lys	Lys
	50				55					60					
Leu	Gly	Cys	Lys	Ser	Phe	Lys	Trp	Tyr	Leu	Asp	Asn	Val	Tyr	Pro	Glu
65				70				75						80	
Met	Gln	Ile	Ser	Gly	Ser	His	Ala	Lys	Pro	Gln	Gln	Pro	Ile	Phe	Val
			85					90					95		
Asn	Arg	Gly	Pro	Lys	Arg	Pro	Lys	Val	Leu	Gln	Arg	Gly	Arg	Leu	Tyr
	100						105					110			
His	Leu	Gln	Thr	Asn	Lys	Cys	Leu	Val	Ala	Gln	Gly	Arg	Pro	Ser	Gln
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Lys	Gly	Gly	Leu	Val	Val	Leu	Lys	Ala	Cys	Asp	Tyr	Ser	Asp	Pro	Asn
	130					135				140					
Gln	Ile	Trp	Ile	Tyr	Asn	Glu	Glu	His	Glu	Leu	Val	Leu	Asn	Ser	Leu
145					150				155						160
Leu	Cys	Leu	Asp	Met	Ser	Glu	Thr	Arg	Ser	Ser	Asp	Pro	Pro	Arg	Leu
			165					170						175	
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	195					200					205				
Asp	Pro	Leu	Gly	Gln	Lys	Gly	Ser	Val	Ala	Met	Ala	Ile	Cys	Asp	Gly
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<210> 6313

<211> 725

<212> DNA

<213> Homo sapiens

<400> 6313

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<210> 6314

<211> 175

<212> PRT

<213> Homo sapiens

<400> 6314

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			20					25					30		
His	Pro	Ser	Thr	Asn	Ser	Leu	Leu	Arg	Glu	Gln	Ile	Ser	Leu	Tyr	Pro
			35				40					45			
Glu	Val	Lys	Gly	Glu	Ile	Ala	Arg	Lys	Asp	Glu	Lys	Leu	Leu	Ser	Phe
			50			55				60					
Leu	Lys	Asp	Val	Tyr	Val	Asp	Ser	Lys	Asp	Pro	Val	Ser	Ser	Leu	Gln
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Val	Lys	Ala	Ala	Glu	Thr	Cys	Gln	Glu	Pro	Lys	Glu	Phe	Arg	Leu	Pro
				85				90						95	
Lys	Asp	His	His	Phe	Asp	Met	Ile	Asn	Ile	Lys	Ser	Ile	Pro	Lys	Gly
			100					105					110		
Lys	Ile	Ser	Ile	Val	Glu	Ala	Leu	Thr	Leu	Leu	Asn	Asn	His	Lys	Leu
			115				120					125			
Phe	Pro	Glu	Thr	Trp	Thr	Ala	Glu	Lys	Ile	Met	Gln	Glu	Tyr	Gln	Leu
			130			135					140				
Glu	Gln	Lys	Asp	Val	Asn	Ser	Leu	Leu	Lys	Tyr	Phe	Val	Thr	Phe	Glu
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				165					170					175	

<210> 6315

<211> 378

<212> DNA

<213> Homo sapiens

<400> 6315

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Gln Met Lys Leu Lys Glu Arg Gln Lys Phe Phe Glu Glu Ala Phe Gln
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Leu Ala Thr Ser His Thr Asp Arg Glu Ala Thr Pro Asp Gly Gly Glu
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Asp Ser Asp Ser
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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.

2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.

3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n .

4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161.

5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprise the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.

6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is a integer 1-3161, or the complement thereof.

7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.